

Routine Tracheostomy Change

A tracheostomy tube is changed to allow for cleaning of the tube. The physician determines the frequency of tube change; the type of lubricant (water based); size and type of tracheostomy tube; reusability and cleaning of tracheostomy tube; and inner cannula care and use. The tube should be changed any time there is suspected tube blockage or displacement, and respiratory distress unresolved with lavage, bag, and suction. Always be prepared for an emergency and have supplies readily available.

The nurse must know the policy and procedure for tracheostomy tube changes and be competent in the procedure. It is preferable for two people to change the tube, though one can do it. It is a good idea to have a set date and preferably the same nurse change the tube. However, in reality this is not always practical. All nurses and caregivers **have to** know how to do this procedure prior to taking care of a child with a tracheostomy. Review frequently and at least an annual competency validation by supervisor should be required. Those nurses who have never changed a tracheostomy tube should be educated and change a minimum of three tubes under supervision. Once the tube has been changed, the nurse must assess the correct tracheostomy tube placement; correct size and type tube; patency of tube; position to midline; ties secured; assess breath sounds; ease of breathing; and patient's tolerance to the procedure. Document all findings as well as the procedure.

Supplies for Routine Tracheostomy Changes

- Current correct size tracheostomy tube with obturator.
- One size smaller tracheostomy tube with obturator.
- Tracheostomy ties.
- Blunt tipped scissors.
- Small towel rolled.
- Water soluble lubricant (sterile) or sterile normal saline in ampule.
- Hemostats.
- Restraints as needed.
- Suction machine with suction catheter set-up.
- Oxygen available if needed.

Procedure for Routine Tracheostomy Changes

1. Select a well-lit location for this procedure, or set-up a good light source.
2. Set-up supplies, cut tracheostomy ties, etc. to make them easily accessible during procedure, maintaining sterility.
3. Explain procedure to child, if age appropriate.
4. Wash hands.

5. Inspect tubes for integrity, absence of cracks, tears or stiffness. If using cuffed tubes, inflate the cuff, checking for any leaks. Deflate cuff before insertion.
6. Attach tracheostomy ties to one side of tracheostomy neck plate (avoid touching the part of the tube that will be inserted into the trachea. Maintain sterility.
7. Insert the obturator into the outer cannula (double cannula tracheostomy tubes). Keep the inner cannula within reach.
8. Place a very small amount of lubricant (or lubricate with normal saline) on the distal end of the tracheostomy tube. Never use petroleum or oil based lubricants.
9. Position the child on his/her backs with the rolled towel under the shoulders to hyperextend the neck. Restraints may be needed.
10. Provide oxygen as needed.
11. If you are right handed, stand at the child's right side, and vice-versa.
12. Cut the old tracheostomy ties while holding the old tube in place. Caution – guard against unplanned extubation at this point.
13. Following the curve of the tracheostomy tube/trachea, gently remove the old tube.
14. Spread the skin around the tracheostomy with your fingers and gently insert the tip of the new tube (with obturator in place) into the opening.
15. IMMEDIATELY remove the obturator and allow the child to breathe while holding the neck plate of the new tube in place with your fingers (the child may cough at this point due to the procedure – guard against unplanned extubation).
16. Listen for air exchange and suction as needed.
17. Provide oxygen as needed.
18. Thread the tracheostomy ties to secure the tube in place if the child is breathing comfortably. Secure with a double or triple knot.
19. Insert the inner cannula (double cannula tracheostomy tubes).
20. Inspect the old tube for color, mucus plugs, odor, and then discard (if disposable).
Metal tracheostomy tubes must be washed, then boiled to sterilize, then thoroughly dried.
21. Praise the child.

Tracheostomy Tube Reuse

The physician determines if the tracheostomy-tube can be cleaned for reuse. If reused, a cleaning routine is established which designates who is responsible for cleaning the tube; what vessel to be used in which to clean the tube; the type of soaking and rinsing solution; soaking and drying time; and storage of supplies.

Instructions should be kept in the home chart so that anyone can do the procedure if needed. Always follow the manufacturer's recommendations. Whether to re-use the tracheostomy tube must

be included in the physician signed plan of care. Always inspect the tube for deformities. Never re-use a tracheostomy tube if the obturator does not fit into the tracheostomy tube, or if the tube is deviated (bent), cracked or discolored.

The cleaned tube should be stored in a sterile container with tracheostomy ties attached. Water based lubricant should be nearby, but not in the container with the tracheostomy tube. The lubricant package can be taped to container. Every time the container is handled, it must be labeled with the date, time, and description of the procedure followed.