

Tracheostomy: Suctioning

A tracheostomy is a surgically made opening in the neck (trachea) to allow breathing when the normal pathways are impaired. The opening is held open with a metal or plastic tube, which is tied in place. **Tracheostomy care may be either an aseptic technique or a clean technique, as specified by the physician.**

I. Personnel Involved

- A. School nurse
- B. Designated school personnel under direct or indirect supervision
- C. School nurse as procedural supervisor

II. General Information

- A. A qualified person, trained in suctioning, must be available when a pupil requiring suctioning is at school.
- B. The pupil's school program is arranged so that he or she is within easy access to the suctioning equipment.
- C. The pupil should be encouraged to cough to clear the airway to possibly eliminate the need for suctioning.
- D. Unnecessary suctioning should be avoided to reduce chances of injury and infection.
- E. Aseptic or clean techniques may be used for suctioning. An aseptic technique requires the use of sterile gloves and a sterile catheter. The clean technique does not require a sterile glove, and the pupil's same catheter may be used throughout the school day.
- F. Suctioning shall be performed according to the prescribing physician's special orders and on request of the pupil. This procedure shall also be performed when:
 1. Noisy, moist respirations occur.
 2. Respiratory distress exists.
 3. Mucus is visible at the tracheal opening.
- G. Personnel giving the treatment should have access to the prescribing physician's order for handling adverse reactions and providing needed intervention, including possible use of a resuscitation bag.
- H. This procedure requires a physician's authorization. The service must be reauthorized yearly by the prescribing physician and the parent.

III. Guidelines

A. Purpose

To maintain an open airway by keeping it clear of excessive secretions

B. Equipment (Parents are responsible for providing and maintaining equipment.)

1. A suction machine, including collecting bottle and connecting tube and adapter when needed (Suction equipment must be available for use on a bus as well as at school. Equipment for use on a bus must be portable [powered by battery or operated manually].)
2. A resuscitation bag when ordered
3. Sterile disposable suction catheters
4. Nonwaxed clean paper cups
5. Supply of sterile normal saline solution
6. Supply of sterile water (to clear catheter) (Tap water is used for the clean technique.)
7. Sterile syringes for introducing saline solution into trachea or individual dose containers of saline
8. Disposable sterile plastic or latex gloves
9. Clean tissues or gauze pads
10. Plastic-lined wastebasket (kept beside machine and used for contaminated materials)
11. Alternative suction equipment for use if primary equipment fails (For example, have foot-operated or battery-operated equipment available.)

Tracheostomy: Suctioning-Procedure

Essential steps	Key points and precautions	Child specific
<ol style="list-style-type: none"> 1. Verify at the beginning of each school day that all equipment and supplies are ready for immediate use. <ol style="list-style-type: none"> a. Use the sample checklist as a guide. b. Initial the list when verified. 2. Wash hands prior to suctioning unless an emergency occurs and you do not have time. 3. Assemble and prepare the equipment in a clean area. <ol style="list-style-type: none"> a. Fill a paper cup with sterile water (clean water for clean technique). b. Open the catheter package without touching the catheter. c. Fill sterile syringe with saline solution or use individual dose containers. 4. Position pupil and place tissue or gauze nearby. 5. Remove the inner cannula (if present) and clean it according to the steps in the procedure under "Tracheostomy: Care and Cleaning of Inner Cannula and Stoma." 6. Put a glove on the hand that handles the catheter. 7. Holding the suction connection tubing with the ungloved hand, attach catheter to suction tubing with the gloved hand. <p>Turn on the machine with your ungloved hand.</p> <ol style="list-style-type: none"> 8. Place the tip of the catheter in a cup of sterile water (or tap water for clean technique) to draw a small amount of water through the tip. 9. Suction as follows: <ol style="list-style-type: none"> a. Leave the vent open and introduce the catheter into the tracheal opening until meeting resistance. b. Withdraw the catheter slightly. 	<p>This step is designed to ensure that all equipment is available. A sample checklist follows this procedure (see "Daily Suctioning Checklist" on page II-103).</p> <p>Positioning depends on the pupil's condition and physician's recommendations.</p> <p>A glove is used to keep the catheter and hand clean.</p> <p>Handle the catheter with the gloved hand only.</p> <p>This step ensures that the catheter is open and lubricated.</p> <p>Suctioning loosens secretions and stimulates coughing. When introducing the catheter, <i>never</i> cover the vent.</p> <p>This technique prevents injury to the tissues.</p>	

<p>c. Place the ungloved thumb over the vent. With the gloved hand, gently rotate the catheter between the thumb and forefinger while slowly withdrawing the catheter.</p> <p>d. Withdraw the catheter immediately when the pupil begins to cough.</p> <p>e. Suction no longer than 10 seconds at a time.</p>	<p>If the catheter remains in one place, the mucous membranes will be drawn against it. This occludes the tube and injures tissue.</p>
<p>f. Repeat steps 8 and 9 (a) through (e) as needed.</p>	<p>The catheter obstructs the cannula and may interfere with bringing up secretions. Allow 1 to 3 minutes between suctioning periods. Prolonged suctioning can cause throat spasms, loss of oxygen, and changes in heartbeat. Respiration's should be quiet and effortless at the end of suctioning.</p>
<p>g. If secretions are thick, instill 3 to 5 cc of saline solution into the tracheal opening. Then repeat steps 8 and 9 (a) through (e) as needed.</p>	<p>Saline aids in dissolving mucus. This will cause coughing; therefore, hold a tissue near the trachea to catch spray and/or mucus.</p>
<p>h. When a mucus plug obstructs the outer cannula, instill saline solution (up to 20 cc) and suction until the plug is loosened. If the plug cannot be loosened and the pupil is in respiratory distress or unable to breathe, remove the outer cannula and replace it according to the steps in the procedure under "tracheostomy: Tube Replacement."</p>	
<p>i. Supply deep breaths with a resuscitation bag between suctioning attempts when ordered to do so by the prescribing physician.</p>	<p>Use of a resuscitation bag provides deep breathing and/or stabilizes disrupted breathing patterns.</p>
<p>10. Suction sufficient water through the catheter to clear out tubing.</p>	
<p>11. Holding the catheter in the gloved hand, pull the glove off, encasing the catheter in the glove, and discard both unless orders specify use of the same catheter all day (clean technique).</p>	
<p>12. Discard the paper cup and syringe.</p>	
<p>13. Recap sterile water and make sure that the equipment is ready for immediate use.</p>	
<p>14. Record the procedure on the SPHCS log.</p>	

15. At the end of the school day, empty the contents of the Suction bottle into the toilet. Wash the bottle with soap and water; wear gloves during the process.