**PROCEDURE FOR STERILE TRACHEAL SUCTIONING**

**PROCEDURE**

1. All equipment for suctioning must be assembled and ready for immediate use at all times and checked daily by the trained school personnel. If the equipment is not present or not functional, the student cannot attend school.

2. Wash hands.

3. Assemble the equipment and materials on a clean work surface:
   - Suctioning machine
   - Sterile suction catheter of prescribed size
   - Sterile saline or sterile water to clear catheter
   - Container for saline or water
   - Disposable gloves
   - BVM and correct size mask
   - Saline dosettes, if indicated

4. Position student.

5. Explain procedure at student’s level of understanding.

6. Turn on suction machine and check for suction.


8. Open saline dosette if instillation is ordered.

9. Fill container with sterile saline or sterile water.

**POINTS TO REMEMBER**

Anticipating the tasks to be done, the risks involved and personal protective equipment needed will enhance protection of both the caregiver and the student.

A disposable, waterproof underpad may be used. All students must have a means of suctioning that can accompany them during all school activities, as well as during bus transportation. A manual means of suctioning, such as a bulb syringe, must be available as a backup at all times for those students who use suction machines.

Peel paper back without touching the inside of the catheter package to maintain sterility.

Saline/water is used to moisten the catheter and to clear out secretions in the catheter.
PROCEDURE


11. Holding the end of the suction catheter in dominant hand, attach it to the suction machine tubing held in the other hand.

12. Turn on the suction machine.

13. Encourage the student to cough and to take a deep breath if possible. If prescribed, manually ventilate with the resuscitation bag.

14. Hold suction catheter 2–3 inches from tip with dominant hand and insert tip in sterile saline or sterile water.

15. Grasp catheter connection with other hand; cover vent hole with thumb to suction a small amount of saline through catheter.

16. With thumb off vent hole, gently and quickly insert catheter into tracheostomy. Do not insert catheter beyond the distal end of the tracheostomy tube.

POINTS TO REMEMBER

The dominant hand should remain “clean”. It should not touch anything but the catheter. The non-dominant hand should be used to turn on switches or touch other objects.

Leave the other end of the catheter in its cover.

Coughing helps to bring secretions up toward the tracheostomy. By taking a deep breath or manually ventilating the student with a BVM, the student will get more oxygen into his/her lungs. This will also help to loosen secretions.

This tests that the suction machine is functioning.

To determine how deep to insert the catheter, it is essential to know the length of the tracheostomy tube. This information is written on the package or can be measured from another trach tube of the same size.

Do not advance the suction catheter past the tip of the tracheostomy tube. Most students are suctioned in an upright position while at school.

If the catheter is inserted too deeply, this can cause irritation/injury to the trachea, as well as bronchospasm. Coughing indicates that the suction catheter has passed the end of the tracheostomy tube.
POINTS TO REMEMBER

17. Rotate catheter gently between thumb and index finger while suctioning and withdrawing. This helps to reach all secretions in the tracheostomy tube.

18. Each insertion and withdrawal of the catheter must be completed within 5 to 10 seconds. Prolonged suctioning blocks the student’s airway and can cause a dangerous drop in the oxygen level. The student needs to clear lungs of carbon dioxide and get new oxygen/air into lungs.

19. If appropriate, ask the student if he or she needs repeat suctioning.

20. If moist, gurgling noises or whistling sounds are heard, or if mucus is seen at the tracheostomy opening, repeat suctioning procedure.

21. If necessary, insert several drops of saline into tracheostomy with non-dominant hand. Manually ventilate with BVM to disperse saline, if ordered.

22. If moist, gurgling noises or whistling sounds are heard, or if mucus is seen at the tracheostomy opening, repeat suctioning procedure.

23. Disconnect catheter from suction tubing. Wrap catheter around gloved hand. Pull gloves off inside out.

24. Discard used suction catheter in appropriate receptacle and wash hands.

25. Note color, consistency (e.g., thin, thick), and quantity of secretions.

26. Document procedure in Healthmaster and EasyTrac, if applicable.

27. Be sure suction equipment and supplies are restocked and checked daily and are ready for immediate use.

PROCEDURE

17. Cover vent hole with thumb while withdrawing catheter.

18. Allow student to breathe or give breaths with BVM between suctioning. Never suction longer than 10 seconds at one time. Suction saline again through catheter to rinse secretions from catheter and tubing.

19. If prescribed, insert several drops of saline into tracheostomy with non-dominant hand. Manually ventilate with BVM to disperse saline, if ordered.

20. If moist, gurgling noises or whistling sounds are heard, or if mucus is seen at the tracheostomy opening, repeat suctioning procedure.

21. Suction the nose and then the back of the mouth, if indicated, after completion of tracheal suctioning.

22. Disconnect catheter from suction tubing. Wrap catheter around gloved hand. Pull gloves off inside out.

23. Discard used suction catheter in appropriate receptacle and wash hands.

24. Note color, consistency (e.g., thin, thick), and quantity of secretions.

25. Document procedure in Healthmaster and EasyTrac, if applicable.

26. Be sure suction equipment and supplies are restocked and checked daily and are ready for immediate use.
<table>
<thead>
<tr>
<th>POSSIBLE PROBLEMS WHEN SUCTIONING</th>
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<tbody>
<tr>
<td><strong>OBSERVATION</strong></td>
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<tr>
<td>The student develops difficulty breathing during suctioning or is not relieved by suctioning.</td>
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<tr>
<td>The tracheostomy tube or inner cannula becomes dislodged.</td>
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<tr>
<td>Bleeding occurs during suctioning:</td>
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<tr>
<td>• The secretions become blood-tinged and the student is not in respiratory distress.</td>
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<tr>
<td>• A large amount of blood is suctioned from the tracheostomy or the student develops respiratory distress while being suctioned.</td>
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<tr>
<td>Bronchospasm occurs during suctioning.</td>
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<tr>
<td>Suctioning ineffective.</td>
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<tr>
<td><strong>REASON/ACTION</strong></td>
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<tr>
<td>Do not leave student alone. Reassure student.</td>
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<tr>
<td>If tracheostomy tube is blocked and suction catheter will not pass, change inner cannula, if present, or replace entire tracheostomy tube. Give breaths with resuscitation bag. Give oxygen.</td>
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<td>Reposition using gentle pressure. If unable to reposition tube, insert new tube. Be prepared to initiate emergency plan.</td>
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<tr>
<td>Stop suctioning. Check vacuum pressure setting. Adjust to lower setting, if appropriate. Continue suctioning as necessary to clear the airway. Use the manual resuscitation bag and oxygen if needed.</td>
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<tr>
<td><strong>Activate the emergency plan and begin CPR if necessary.</strong></td>
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<tr>
<td>Reassure student.</td>
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<tr>
<td>May be due to excessive suctioning. Allow student to calm him/herself. If unable to remove catheter, disconnect from suction tubing and hold oxygen near end of suction catheter. When bronchospasm relaxes, remove catheter. If bronchospasm persists, student may require medication. Notify parent/guardian, and licensed health care provider.</td>
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<td><strong>Activate emergency plan and call 911.</strong></td>
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