Tracheostomy tubes are routinely changed to prevent mucus from building up within the tubing. Mucus may block the tube and prevent air from entering the lungs. The tube needs to be changed if it is blocked or accidentally dislodged. In a school setting, this procedure should be done only in an emergency situation.

**Suggested Settings:** Routine tracheostomy tube changes are performed in the home. The tube should be changed or reinserted wherever the student is, even if conditions are not ideal.

**Restrictions:** All tracheostomy care requires a current order from a physician paying particular attention to:
- Student’s need for support during reinsertion.
- Student’s underlying condition and possible problems associated with the condition or treatment (e.g., tracheal stenosis)
- Student’s baseline status (e.g., color, respiratory rate, pulse)
- Type and size of tracheostomy tube
- Signs and symptoms of respiratory distress (e.g., agitation, blueness of lips and/or fingernails)
- Student’s ability to request assistance
- Student’s ability to breathe without a tracheostomy tube
- Difficulty with reinsertion of a dislodged tracheostomy tube

All equipment for changing a tracheostomy tube must be assembled and available for immediate use at all times and checked daily by trained caregiver. If the equipment is not present or not functional, the student should not be at school nor transported on the bus. Although only a registered nurse or a licensed practical nurse, who is designated and trained by a registered nurse, should perform this procedure. It may be performed by any personnel, in an emergency situation, who are trained by a registered nurse. Procedure should be done by two persons, but can be done by one in an emergency.

**Indications for tracheostomy tube changes:**
1. Blocked or dislodged tracheostomy tube.
2. When a student is in respiratory distress and presents with the following:
   a. Excessive coughing or choking
   b. Difficulty in breathing with agitation
   c. Cyanosis (blue)

**Problem:** Inadequate air exchange r/t blocked or dislodged tracheostomy tube
**Goal:** Appropriate changing of tracheostomy tube without damage to airway

**Procedure:**
1. Wash hands.
2. Assemble needed equipment:
   a. Prescribed type and size of tracheostomy tube for student and one size smaller
   b. Twill tape or other ties
c. Obturator, if applicable
d. Blunt scissors
e. Resuscitation bag (Ambu bag)
f. Oxygen, if ordered
g. Suctioning machine and supplies
h. Syringe, if trach tube is cuffed
i. Sterile water-soluble lubricant or sterile saline (never use Vaseline or oil-based lubricant)
j. Blanket roll, if needed
k. Gloves

3. Explain procedure to student, if possible.
4. Position student lying down, position may vary depending on student’s health history
5. Open tracheostomy tube package. Avoid touching the curved part of the tube.
6. Puts on gloves.
7. Places obturator into clean trach tube, if applicable.
8. Lubricate the end of tube with water-soluble lubricant or sterile saline.
9. If available, have an assistant hold the old trach tube in place while ties are cut or undone.
10. When new tube is ready have an assistant remove the old tube. Insert the new tube at a right angle to the stoma, rotating it downward as it is inserted. If an obturator is present, insert tube straight into stoma. Hold in place.
11. Remove the obturator, if used. Attach ventilator (if required within a certain amount of time) and have assistance hold trach in place.
12. Hold the new tube in place while the ties are attached. Leave one finger width between ties and neck.
13. Listen for air movement through trach tube. Watch for chest to rise and fall. Observe student for signs of distress (e.g., restlessness, cyanosis, shortness of breath, agitation).
14. Place gauze around tracheostomy tube, if available.
15. Wash tracheostomy with warm water and discard used equipment in an appropriate manner.
16. Remove gloves and wash hands.

Possible Problems

<table>
<thead>
<tr>
<th>Problem</th>
<th>Action</th>
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<tbody>
<tr>
<td>Tracheostomy tube comes out</td>
<td>Never leave student alone. Call for assistance. Follow changing a tracheostomy tube procedures. Reassure the student. Administer oxygen via the tracheostomy. Suction. Use bronchodilators, if ordered. Use manual resuscitator bag, if indicated. If difficulty continues, initiate emergency plan and begin CPR.</td>
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<tr>
<td>Signs/No signs of respiratory distress</td>
<td></td>
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<tr>
<td>Able to reinsert but student still having difficulty</td>
<td></td>
</tr>
<tr>
<td>Tube cannot be reinserted.</td>
<td>Never leave student alone. Call for assistance. Reassure the student. Encourage the student to take a deep breath – be prepared to insert tube if stoma opens. Administer oxygen directly to the tracheostomy stoma. If still unable to insert tracheostomy tube, attempt to insert the smaller tracheostomy tube or thread a suction</td>
</tr>
</tbody>
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catheter through the new tracheostomy tube. Attempt to insert catheter through stoma into trachea as a guide for the tracheostomy tube. Slide tracheostomy tube over catheter into stoma and remove catheter without dislodging tracheostomy tube.

Tube cannot be reinserted. Signs of respiratory distress and/or respiratory arrest

Encourage student to take a deep breath. Insert tube if stoma opens. Administer oxygen to the tracheostomy stoma. Reposition the student. Call 911 immediately! Begin CPR with mouth-to-mouth breaths, following universal precautions. Cover trach stoma with your thumb if an air leak is present. Have someone alert the school nurse, principal, and parent immediately.

Aspiration of foreign material (i.e. food)

Suction as outlined in Suctioning Procedure. Check for air movement. Reassure the student. If it is still blocked, change tracheostomy tube. Check air movement. Repeat suctioning, if necessary. Repeat above until aspirated secretions are clear or gone. Administer oxygen if prescribed in emergency plan. Bronchospasm (wheezing) may also occur. The student may require medication. Respiratory distress or arrest can occur with any aspiration. Call 911 immediately. Notify family and physician.

Thick or yellow or green secretions.

This may indicate infection. Document what you see and notify the parents. If secretions are just thicker, the student may need more humidity. Check temperature and other signs/symptoms of infection. Also look for redness, secretions, bleeding or pain at the stoma, if present may be other signs of infection. Clean site and notify parents.

Definitions:

Obturator– A small plastic device which is used as a guide for insertion of the tracheostomy tube.
Sims Connector Connector– A small plastic tube that fits on the end of the tubing of a portable suction machine. The Sims Connector allows the trach to be suctioned, but prevents the catheter from going too far into the trach. This piece of equipment is essential in the school setting.