LOS ANGELES UNIFIED SCHOOL DISTRICT
Office of the Chief Medical Director
District Nursing Services

TRACHEOSTOMY SUCTIONING

I. GENERAL GUIDELINES

PURPOSE

To maintain an open airway by keeping the tracheostomy tube clear of excessive secretions.

A. GENERAL INFORMATION

1. Suctioning removes excessive secretions from the trachea.
2. A qualified person, trained in suctioning, must be available when a student requiring suctioning is at school, during school bus transportation, and approved school sponsored activities.
3. All equipment for suctioning must be assembled and ready for immediate use at all times and checked daily by qualified designated school personnel. If the equipment is not present or not functional, the student is not to attend school.
4. A student who has a tracheostomy tube must have authorization for a Tracheostomy Tube Replacement Emergency Procedure from a Licensed Healthcare Provider.
5. Emergency Care Plan for Student with Tracheostomy is completed by the school nurse and distributed to teacher, administrator and designated school personnel.
6. **Encourage student to cough to clear airway and possibly eliminate need for suctioning. Some students may not be able to cough.** Avoid unnecessary suctioning to reduce chances of injury and infections.
7. Clean technique is to be used for suctioning unless sterile technique is ordered by a Licensed Healthcare Provider.
8. Suctioning shall be performed:
   a. According to Licensed Healthcare Provider's specific orders
   b. Upon request of student
   c. When noisy, moist respirations occur including wheezing or coughing
   d. When in respiratory distress, which may manifest as change in skin color, agitation, retraction of muscles in the neck and chest, and/or nasal flaring
   e. When mucus is visible at tracheal opening.
9. Avoid exposure to areas with dust, chalk dust, powders, strong fumes, and aerosolized particles. Avoid contact with small particles such as sand, glitter, and animal hair. Avoid water, which could be splashed into tracheostomy tube opening. Avoid substances with strong fumes near a student with a tracheostomy. If ordered, a student may need a protective covering for the tracheostomy.
10. If ordered by a Licensed Healthcare Provider, a student may have the tracheostomy tube capped, wear a speaking valve (i.e. Passy Muir

Valve) to aide in speaking more clearly, a humidification device or protective screen. See item #18 for Passy Muir Valve Guidelines.

11. Hourly and as needed (PRN) documentation in Welligent is required for all students with tracheostomy suctioning protocol.

B. PERSONNEL

1. School nurse or school physician.
2. Designated school personnel under the direct or indirect supervision of the school nurse.

C. EQUIPMENT

1. Provided by parent/guardian:
   a. Battery-operated suction machine with AC Adapter including collection bottle and connecting tube and adapter when needed
   b. Resuscitation bag with adapter
   c. Sterile disposable suction catheters of appropriate size
   d. Sterile or distilled water (may be boiled water) to clear catheter (if using bottled water, **NO** spring water is to be used)
   e. Normal saline ampules.

2. Provided by school:
   a. Non-waxed paper or plastic cups
   b. Disposable non-latex gloves (and other personal protective equipment such as googles and mask as determined by school nurse)
   c. Tissues or 4x4 gauze
   d. Plastic bag for disposal of waste
   e. Aluminum foil
   f. Manual suction device for use if primary equipment fails. See item #19 for Guidelines for Non-working Suction Machine.

II. PROCEDURE

ESSENTIAL STEPS	KEY POINTS AND PRECAUTIONS
1. Verify at the beginning of each school day, that all equipment/supplies are available and ready for immediate use.	Use daily Suctioning Checklist and initial daily after checking equipment. Equipment must accompany student at all times.
2. Encourage student to cough to expel secretions, if able.	Coughing may eliminate need for suctioning.
3. Wash hands prior to suctioning unless it is an emergency.	

ESSENTIAL STEPS	KEY POINTS AND PRECAUTIONS
4. Assemble equipment on aluminum foil on clean flat surface: a. Fill cup with water (boiled, distilled or sterile) **NO SPRING WATER** b. Open catheter package without touching catheter c. Place tissue or gauze nearby.	Set up may be re-used during the day unless heavy secretions require more frequent changes. Do NOT put catheter directly into water bottle/container since this contaminates the sterile water. If catheter comes in contact with unclean surface, such as floor, it should be discarded.
5. Position student in appropriate position.	Positioning is dependent upon student's condition and Licensed Healthcare Provider's recommendations, usually seated upright.
6. Put on disposable non-latex gloves.	To maintain good technique, dominant gloved hand should remain clean and is only used to handle the catheter tip.
7. Attach suction catheter to suction machine connection tubing. Turn on machine with non-dominant gloved hand.	
8. Hold catheter 2-3 inches from the tip and suction a small amount of water from the container.	This checks patency of the system, lubricates catheter, and prevents secretions from sticking to the inside walls of the suction catheter.
9. Suction as follows: a. Leave the vent of the catheter open. Insert the catheter gently. DO NOT insert beyond end of the tracheostomy tube	Suctioning loosens secretions and stimulates coughing. When introducing catheter **never** cover the vent of the catheter. If catheter is inserted too deeply, it may cause irritation/injury to trachea and possible bronchospasm.
b. Place non-dominant gloved thumb over vent; simultaneously, rotate catheter gently between thumb and forefinger of dominant hand while slowly withdrawing catheter.	This helps to reach all secretions in the tracheostomy tube.
c. Suction no longer than 5 seconds.	Prolonged suctioning can cause tracheal spasm, loss of oxygen and changes in heart rate.

ESSENTIAL STEPS	KEY POINTS AND PRECAUTIONS
d. Withdraw catheter if student begins to cough.	Catheter obstructs tracheostomy tube and may interfere with bringing up secretions.
e. Draw sufficient water through the catheter to clear tubing of secretions.	
f. Allow student to breathe or give breaths with resuscitation bag, if ordered between suctioning.	Allow 3 to 5 deep breaths between suctioning to allow student to replenish oxygen. Student also needs to clear lungs of carbon dioxide between suctioning.
g. Repeat steps 'a' through 'f' until secretions are removed.	
h. If ordered, instill sterile normal saline drops into the tracheostomy tube opening for thick secretions or mucous plug using non- dominant hand. Then repeat (step 9: 'a' through 'f') as needed.	Saline aids in dissolving mucous. This will cause coughing which is normal; therefore hold tissue near tracheostomy opening to catch spray and/or mucous. If unable to loosen mucous plug with normal saline drops, remove tracheostomy tube and replace with a new tracheostomy tube following "Tracheostomy: Tube Replacement Protocol."
10. Observe effectiveness of suctioning by observing respirations.	Respirations should be quiet and should occur with minimal effort. If moist gurgling noise, whistling sounds or mucous is present at tube opening, suction again following (Step 9: 'a' through 'f')
11. When suctioning is completed, draw sufficient water through catheter to clear tubing. Cover catheter for reuse. (May be replaced in its original package.) Turn off suction machine.	Catheter can be reused for one school day (for tracheostomy suctioning only). Change catheter if unable to clear secretions inside the catheter or if contaminated.
12. Clean around stoma, and replace gauze if applicable.	Use fenestrated gauze provide the parent, DO NOT cut gauze square with scissors.
13. Dispose waste materials.	Universal Precautions require that all waste material be double bagged.
14. Remove gloves and wash hands	
15. Make sure equipment is ready for immediate reuse.	

ESSENTIAL STEPS	KEY POINTS AND PRECAUTIONS
16. Document procedure indicating: a. Reason for suctioning b. Amount, color, and consistency of secretions c. If normal saline drops are used d. Response of student e. If no suctioning is required during the school day.	Report to the school nurse and family any changes from the student's usual pattern.
17. At the end of the day, put on gloves and empty contents of collection bottle into the toilet. Rinse collection bottle with warm, soapy water.	Do not allow collection bottle to fill completely. Collection bottle is to be returned to parent/guardian in a clean condition.
18. Guidelines for Speaking Valve (Passy Muir Valve): a. Attach to top of tracheostomy tube twisting to the right (clockwise) approximately ¼ turn b. To remove valve, twist off to the left (counter clockwise).	Remove IMMEDIATELY if student has difficulty breathing or needs suctioning. Clean with mild soap and water if removed at school.
19. Guidelines for Non-Working Suction Machine: a. Notify parent/guardian immediately b. Attach appropriate sized non-vented catheter to a 60cc syringe c. Insert 2-3 inches of the catheter into tracheostomy tube opening d. Pull syringe plunger out forcefully to create suction e. Remove catheter from tracheostomy tube and empty contents of barrel onto a tissue paper f. Repeat as needed. **CALL 911 IF STUDENT IS IN RESPIRATORY DISTRESS**	Pulling plunger out of the syringe will create a "pop" sound. May need to repeat procedure multiple times to clear secretions.  (A non-vented catheter attached to a 60 cc syringe).

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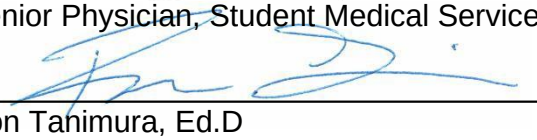

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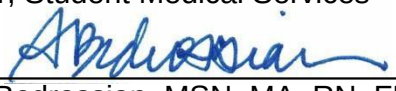

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