

MECHANICAL NEBULIZER

I. GENERAL INFORMATION

- A. A mechanical nebulizer is powered by either oxygen or compressed air to convert liquid to a fine continuous mist.
- B. Purpose is to improve breathing by the administration of bronchodilators, mucolytics, or other medications directly into the lungs by means of aerosol mist, and to provide high humidity to assist the breakup of pulmonary and bronchial secretions and aid the student in coughing.
- C. Medication by nebulizer may be ordered on a scheduled or as needed basis. Physicians' orders must contain specific criteria for use such as wheezing, coughing, restlessness, duskiness, etc.

Temporary side effects of bronchodilators may include rapid heartbeat, palpitations, dizziness, nausea and excessive perspiration. Inform the school nurse.

- D. If the student does not improve but develops signs of increased respiratory distress contact the school nurse and/or paramedics. Severe respiratory distress may include:
 - 1. Loud audible wheeze/noisy respirations.
 - 2. Flaring nostrils.
 - 3. Respiratory retractions.
 - 4. Blueness/duskiness around mouth/nails.

II. PERSONNEL

- E. School Nurse
- F. Designated school personnel.



MECHANICAL NEBULIZER

Student's Name:	DOB:
Equipment and Supplies1. *Mechanical nebulizer with cup and mouthpiece or mask.3. *Medications and diluent (saline, etc.)*(Responsibility of parent/care- provider)2. *Connection tubing.4. Personal Protective Equipment (gloves, gown, mask, goggles, etc.)PROCEDUREESSENTIAL CUEPPOKEY POINTS & PRECAUTIONS	
STEPS 1. Determine the need for use of nebulizer.	The need for nebulizer may include wheezing, coughing, restlessness, and or/ duskiness. Bronchodilators side effects that you may see are tachycardia, rapid heartbeat, palpitations, dizziness, nausea, and excessive perspiration.
 Wash hands. Assemble equipment and medication, as ordered, near the student. Explain the procedure to the student. 	Refer to manufacturer guidelines for assembly. Use language and demonstration methods that are appropriate for the student's level of development because the effectiveness of this therapy depends on the student's cooperation
 5. Place the appropriate amount of medication and saline solution or diluent in the nebulizer. 6. Place the student in a comfortable sitting position. 	Refer to Physician medication order for prescribed amount. Expansion of the lungs and movement of the diaphragm are greatest in this position, allowing for maximum treatment.
 7. Turn on nebulizer and observe fine mist. 8. Have the student place mouthpiece/ mask in position. 9. Instruct student to breathe slowly and deeply until all fluid has been 	Deep breaths ensure that the medication is deposited below the oropharynx.
nebulized.	Remove the mouthpiece or mask if a cough occurs during the treatment, and allow the student to clear the secretions completely. If coughing is prolonged turn off machine to conserve medication. Continue the treatment when coughing subsides. Give the student time to rest during the procedure if needed.
ESSENTIAL STEPS	KEY POINTS & PRECAUTIONS

 Turn nebulizer off. Disassemble and clean as directed. Wash hands. 	CLEANING AND CARE OF THE NEBULIZER:
	 A. Disconnect the nebulizer, mouthpiece, and/or mask and rinse under hot running water. B. Shake off the excess water. C. Lay these parts on a clean cloth or towel and cover the nebulizer parts with a cloth or towel. D. If moisture remains in tubing, allow nebulizer to run a few minutes until tubing is dry. E. When the parts are dry, store them in a clean plastic bag, the top of which can be sealed. The tubing does not have to be cleaned, but should be stored in the same bag with the other equipment. Daily through cleaning should be done by parent/care-provided.
11. Document procedure on SPHCS and medication logs.	