

# AEROSOL NEBULIZERS/INHALERS

## PURPOSE

- To administer medication and provide humidification to the tracheobronchial tree.
- To increase alveolar and total ventilation.
- To facilitate the ability to cough and remove secretions.

## APPLIES TO

- Registered Nurses
- Licensed Practical/Vocational Nurses
- Therapists
- Other (Identify): \_\_\_\_\_

## EQUIPMENT/SUPPLIES

- Oxygen source or compressed air.
- Connective small bore tubing.\*
- Nebulizer cup.\*
- Aerosol medication.
- Sterile normal saline.
- Mouthpiece or adapter if client has a tracheostomy.
- Disposable gloves, as needed.

*Note: You may use a universal Intermittent Positive Pressure Breathing (IPPB) circuit if the client is on a ventilator.*

## PROCEDURE

1. Wash hands. Refer to the Hand Washing procedure.
2. Take vital signs
3. Prepare nebulizer. Fill it with prescribed amount of medication and sterile normal saline.
4. Turn on oxygen/compressed air source and set flow meter at prescribed level. You should see a visible mist flowing out of the mouthpiece.
5. Place the client in a sitting or semi-Fowler's position, unless contraindicated.
6. Insert mouthpiece or attach adapter to begin medication administration. If the client is wearing a nasal cannula, leave it in place.
7. Instruct the client to inhale slowly and deeply. *Slow, deep breathing helps to maximize medication administration through ventilation of the lungs.*
8. Hold or instruct the client to hold the nebulizer in an upright position. *If nebulizer is not held upright, the medication may spill out into the client's mouth.*
9. Stay with the client and monitor pulse and respirations. *Stop treatment if the client's pulse increases by more than 20 beats per minute.*
10. Observe the client for any adverse reactions. If present, stop administration and notify the physician. *Adverse reactions include: shortness of breath, wheezing, palpitations, tachycardia, light headedness, dizziness, agitation, tremors.*
11. Encourage the client to cough up sputum. If he has a tracheostomy tube or is intubated, suction following the appropriate procedure.
12. When treatment is complete, i.e., when the nebulizer cup is empty, turn off the flow meter.
13. Reposition the client comfortably.
14. Clean equipment according to the Agency Waste Disposal Policy. Allow equipment to air dry on paper towel. When dry, store in sealed plastic bag.
15. Wash hands. Refer to the Hand Washing procedure.

## DOCUMENTATION GUIDELINES

1. Document in the clinical record:
  - a. Vital signs before, during, and after treatment.
  - b. Medication name, dose, and route.

- c. Length of treatment and time given.
- d. Adverse reactions to treatment.
- e. Characteristics of sputum or secretions.
- f. Report given to physician, if any.

**RELATED PROCEDURES**

Coughing and Deep Breathing Exercises, Suctioning Procedure,  
Medication Administration Procedures.