

# **Nebulizer Fact Sheet**

The nebulizer is a device used to administer medication in a fine mist, which can be inhaled into the lungs.

#### **Indications**

- Treatment for respiratory conditions; such as asthma, COPD, and cystic fibrosis
- Treatment for conditions that require the delivery of bronchodilator medications
- Patients with poor hand or breathing coordination who are unable to perform the metered-dose inhaler (MDI) technique with or without a valved holding chamber

# **Cleaning Instructions**

Follow the manufacturer's instructions.

### If none are available, some general steps include:

After each treatment:

- Wash hands thoroughly
- Disassemble the nebulizer by removing the mask/mouthpiece from the medication cup, open the medication cup, and remove all pieces
- Do not wash the nebulizer tubing
- Rinse the medication cup and mask/mouthpiece under warm water
- Shake off excess water and allow to air dry completely before next use

## Every other day with vinegar and water:

- Wash hands thoroughly
- o Do not wash the nebulizer tubing
- Disassemble the nebulizer by removing the mask/mouthpiece from the medication cup, open the medication cup, and remove all pieces
- Soak the nebulizer for 1 hour in a solution of 1 part distilled white vinegar and 3 parts hot water
- Remove the nebulizer parts from the vinegar solution and rinse with water. Discard vinegar solution.
- Shake off excess water
- o Reassemble the nebulizer
- Attach tubing to the air compressor and turn on the compressor to dry the nebulizer quickly. Allow all parts to air dry completely before next use. Store in clean plastic bag.

#### References

- Association of Asthma Education. "How to Take Your Asthma Medications: Treatments by a Nebulizer Hooked up to an Air Compressor Machine", [PDF Document].2008; retrieved from <a href="https://www.asthaeducators.org">www.asthaeducators.org</a>.
- 2. National Jewish Health: <a href="http://www.nationaljewish.org/healthinfo/medications/lung-diseases/devices/nebulizers/instructions/">http://www.nationaljewish.org/healthinfo/medications/lung-diseases/devices/nebulizers/instructions/</a>.
- 3. Wilkins R.L. & Stoller J. K, & Kacmarek R.M. (2009). Aerosol Drug Therapy. In J. Fink (Eds.), Egan's Fundamentals of Respiratory Care, 9<sup>th</sup> edition (pp 801-842). St. Louis, Missouri: Mosby Elsevier.



Patient Name: _			
Patient ID:_			
Evaluator Initials:_			
Date:	_/_	_/_	

#### **NEBULIZER TECHNIQUE CHECKLIST**

<u>Trained assessor to read to participant</u>: Please show me exactly how you use your nebulizer at home.

		Pre		Post 1		Post 2		Post 3	
		Wrong	Correct	Wrong	Correct	Wrong	Correct	Wrong	Correct
1.	Removes the nebulizer from the plastic packaging.								
2.	Fill the medication cup with the prescribed medication.**	$\Box_0$		$\Box_0$		$\Box_0$		$\Box_0$	
3.	Next, connect the mask or mouthpiece to the top of medication cup.								
4.	Connect the tubing to the medication cup (nebulizer) and then to the power source (compressor). Hold cup upright to connect tubing.**			$\square_0$	$\square_1$				
5.	Turn on the power.	□₀		□₀		□ <sub>0</sub>			
6.	While sitting in an upright position, hold the medication cup upright and form a tight seal with the mask to your face or lips around the mouthpiece.								
7.	Inhale slowly throughout the treatment.	$\square_0$		$\Box_0$		$\Box_0$		$\Box_0$	
8.	The treatment is complete when the nebulizer starts to sputter.								
9.	When the treatment is done, turn off the compressor. Remove and wash out the medication cup with warm water and air dry.			$\square_0$					
10.	If using corticosteroid, rinse mouth and spit.	$\Box_0$				$\Box_0$			
	Participant's Score:	/10		/10		/10		/10	

<sup>\*\*</sup>Patients can also connect the tubing (step 4) before they fill their medication cup (step 2)