



# medfacts

AN EDUCATIONAL HEALTH SERIES FROM NATIONAL JEWISH HEALTH™

## USING A NEBULIZER

Many medications are available as inhaled treatments. Inhaled methods deliver medication directly to the airway, which is helpful for lung diseases. The patient and health care provider can choose from a variety of delivery systems for inhaling medication.

A nebulizer delivery system consists of a nebulizer (small plastic bowl with a screw-top lid) and a source for compressed air. The air flow to the nebulizer changes the medication solution to a mist. When inhaled correctly, the medication has a better chance to reach the small airways. This increases the medication's effectiveness.

### Assemble the Nebulizer and Air Compressor

1. Place the compressor where it can safely reach its power source and where you can reach the *ON/OFF* switch.
2. **Wash your hands prior to preparing each treatment.**
3. **Use a clean nebulizer.**
4. **Measure the correct dose of medication and other solutions prescribed by your physician. Add these to the nebulizer.**
5. **Connect the air tubing from the compressor to the nebulizer base. A finger valve may also be attached between the nebulizer base and tubing. Make sure all connections are snug.**
6. **Attach a mouthpiece to the nebulizer.**
7. **Turn the compressor on and check the nebulizer for misting.** When using a finger valve, cover the air hole to force the air to the nebulizer.

### If the nebulizer is not misting

1. Check all connections.
2. Refer to manufacturer's instructions

### Taking the Nebulized Treatment

1. **Put the mouthpiece in your mouth between your teeth and close your lips around it.**
2. **Hold the nebulizer in an upright position.** This prevents spilling and promotes nebulization.
3. **Gently breathe out.**
4. **To start the mist, cover the hole in the finger valve with a finger.** If you are not using a finger valve, the nebulizer will continually mist.

5. **As the mist starts, breathe in slowly and deeply over three to five seconds**, while keeping your finger over the valve hold.
6. **At the end of a deep breath, uncover the finger valve hole to stop the mist.**
7. **Hold your breath for up to ten seconds.** This allows the medication time to deposit in the airway.
8. **Resume normal breathing.**
9. **Occasionally tapping the side of the nebulizer helps the solution drop to where it can be misted.**
10. **Continue these steps until the onset of inconsistent nebulization, i.e. sputtering.**

## **Care and Cleaning of Nebulizer Equipment After Each Use**

**Please follow the manufacturer's instructions for cleaning the nebulizer equipment. Some suggested guidelines include the following:**

1. Take apart the nebulizer. Wash all parts (except tubing and finger valve) in liquid dish soap and water. Rinse with water.
2. After washing the nebulizer shake off any excess water.
3. Reattach the nebulizer pieces and tubing to the air compressor and turn on the compressor to dry the nebulizer quickly. **Make sure the nebulizer is completely dry before storing the nebulizer.**

## **Care and Cleaning Every Other Treatment Day**

### **Vinegar and Water**

1. Wash your hands.
2. Soak all parts of the nebulizer (except mask, tubing and interrupter) for 1 hour in a solution of 1 part distilled white vinegar and 3 parts hot water. The solution should be fresh. Remove the parts from the vinegar solution and rinse them in water. Discard the solution.
3. Shake off any excess water.
4. Reattach the nebulizer pieces and tubing to the air compressor and turn on the compressor to dry the nebulizer quickly. **Make sure the nebulizer is completely dry before storing the nebulizer.**

## **Care of the Compressor**

1. Check the manufacturer's instructions for cleaning and care of the compressor you are using.

Note: This information is provided to you as an educational service of National Jewish. It is not meant to be a substitute for consulting with your own physician.

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