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 \textit{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. Make sure all connections are snug.
6. Attach a mask to the nebulizer.
7. Turn the compressor on and check the nebulizer for misting.

If the nebulizer is not misting:
1. Check all connections.
2. Refer to manufacturer's instructions.

Taking the Nebulized Treatment
1. Hold the mask to the face so both the nose and mouth are covered. The mask may be secured to the head with an elastic band.
2. Turn the compressor on to start the mist. The head should be held upright. This correctly positions the nebulizer and opens the airway.
3. Assure deep breathing throughout the treatment.
4. Occasionally tapping the side of the nebulizer helps the solution to drop to where it can be misted.
5. Continue the treatment 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 of Nebulizer Equipment Every Other Treatment Day**

There are two ways to disinfect and sterilize your nebulizer. Boiling the nebulizer is the preferred method if your nebulizer can be boiled

**Boiling Water**
1. Wash your hands.
2. Take the nebulizer apart.
3. Put all the parts of the PARI LC JET+™ except the mask, tubing and interrupter in boiling water for 10 minutes.
4. After boiling the nebulizer shake off any excess water
5. 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.

**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.

The tubing is replaced every two weeks because it is difficult to clean and dry properly.

**Care of the Compressor**

Check the manufacturer’s instructions for cleaning and care of other 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.