

# Home Nebulization Treatments

Many medications are most effective when inhaled directly into the lungs. To be inhaled into the airways of the lungs, medication must be changed from a liquid to a fine mist. To create this fine mist at home, you need a nebulizer and an air compressor. A nebulizer is a plastic container that changes liquids into a fine mist using a jet of air. The compressor, run by electricity or battery, provides the jet of air to the nebulizer.

## How is the home nebulizer used?

1. Place the compressor on a hard surface. Make sure the filter is free of dust and dirt. If it is dirty, rinse it with water and then dry it. Plug in the compressor.
2. Place the prescribed amount of medicine(s) into the nebulizer with a dropper or syringe. If you have a question about mixing medicines, call your health care provider.
3. Some asthma medicines come premixed with sterile saline. Other medicines need saline added. You can buy sterile normal saline in two ways: in unit dose plastic vials or a pressurized canister (Bronchosaline). Two squirts from the canister should be enough. Never put a homemade saline solution into a nebulizer.
4. Attach the nebulizer to the compressor tubing. Turn the power on. (The medication will immediately begin to be nebulized.) Place the mouthpiece in the mouth and breathe in and out slowly through the mouth until all the medication is gone. If the child is able, tell the child to take an extra deep breath every 10 breaths or so, hold that breath for 10 seconds, and then breathe out slowly. This technique permits the medication to stay in the lungs longer for better effect.

If a child is too young to use a mouthpiece, use a mask. The mask can be secured loosely over the nose and mouth so the child does not become frightened.

Most nebulizers must be held in an upright position to work well. If the mixture has coated the sides and isn't being nebulized, gently tap the side of the nebulizer occasionally during the treatment. An average treatment takes 10 to 15 minutes. The treatment is over when all the medication is gone and the nebulizer makes a constant sputtering noise.

Some children cough up mucus after breathing treatments. Note the mucus color and thickness. Normal secretions are usually thin and white or clear. Thick, sticky mucus that is yellow or green may indicate infection. Call your doctor to report a change.

If your child needs more treatments than prescribed by your doctor, or if the treatments do not improve the symptoms, call your doctor.

## How and when should the nebulizer be cleaned?

After each treatment, rinse the nebulizer, mouthpiece or mask, and T-piece under hot running water. Shake off excess water, place the pieces face down, and let them air dry. Store the pieces in a clean bag. It is not necessary to clean the compressor tubing.

If you use the nebulizer frequently, you should clean it about 3 times a week. Wash your hands before handling the nebulizer.

1. Soak the nebulizer, mouthpiece, and measuring devices in warm water with a mild liquid detergent. If you are using a mask, wipe down the inside and outside of the mask with a paper towel mixed in the detergent solution.
2. Rinse each piece thoroughly in clean, warm running water.

3. Soak all the pieces for 20 minutes in a freshly prepared solution of 1 part vinegar and 8 parts water.
4. Remove the pieces from the vinegar and water solution and rinse them thoroughly again in clean, warm running water.
5. Shake off any moisture and allow them to air dry on a clean towel. When the pieces are completely dry, store them in a sealed plastic bag.

## **What special instructions should be followed?**

Your doctor has prescribed nebulizer treatments to be given \_\_\_\_\_ times a day. The medication(s) to be used is(are) \_\_\_\_\_ (the amount is \_\_\_\_\_), and is mixed in \_\_\_\_\_ ml of normal saline (other: \_\_\_\_\_).