Asthma and COPD: How to Use a Nebulizer

This handout is for people who use a nebulizer to take medication for asthma, COPD (chronic obstructive pulmonary disease), or other lung conditions. It explains what a nebulizer is and how to use it correctly. It includes information for parents helping their child use a nebulizer.

What is a nebulizer?
A nebulizer is a device that uses forced air to turn medication into a fine mist that can easily be breathed into the lungs. Doctors often prescribe nebulizers for children and for people who may not be able to breathe in deeply enough to use an inhaler. For some people — and with some medications — nebulizers are the most effective way of delivering inhaled medications.

Parts of a nebulizer
A nebulizer has the following parts:

• A **compressed air machine**
• A **medication cup** to contain the medication
• Thin **plastic tubing** that connects the medication cup to the compressed air machine
• A **mouthpiece** or **facemask** used to breathe in the mist

A snug-fitting facemask should be used if the person receiving the treatment is unable (or unlikely) to breathe only through the mouth during the treatment. A mouthpiece can be used for all other people.

How to use a nebulizer
If a nebulizer is recommended for you, your doctor or respiratory therapist will show you how to use it. Here are some general instructions:

1. Fill the medication cup with the prescribed amount of medication.
2. Connect the tubing.
3. Screw the mouthpiece (or facemask) on top of the medication cup.
4. Sitting up straight and holding the medication cup upright, put the mouthpiece into your mouth (or the mask over your mouth).
5. Turn the machine on.
6. Breathe deeply and slowly through your mouth.
7. Tap the medication cup if the contents begin to sputter before the medication is gone.
Cleaning and maintenance

The parts of the nebulizer need regular cleaning and inspection. Follow the instructions that come with your nebulizer. (Most manufacturers recommend cleaning some of the parts after each use.) Also, replace parts as often as the manufacturer recommends — or earlier, if you notice a problem. (Sometimes the company that provides your equipment will check your nebulizer for you.)

Using other medication delivery devices

You might also use an inhaler — a portable, hand-held tool — to take a lung medication.

To learn more on how to use an inhaler, see the fact sheet Asthma and COPD: How to use a Metered Dose Inhaler, or the booklets Breathing Easier with Asthma and Breathing Well with COPD.

FOR PARENTS AND CAREGIVERS: helping a child adjust to a nebulizer with a mask

Doctors often recommend that young children use nebulizers with masks. To help your child adjust to the mask, try the following tips:

- Invite the child to explore the mask. Let the child practice putting it on or pretend to give it to a doll or parent.
- When appropriate, encourage the child to help hold the mask during the treatment.
- If the child has difficulty holding still while using the mask, provide a small incentive or distraction.
- If the tips above don’t work, you may need to gently hold the child while using the mask.

Persistence pays!

A child who resists the mask will eventually cooperate if you continue to give treatments regularly. So stay consistent. If your child senses that treatments are optional, she or he will probably continue to resist.

BLOW-BY TECHNIQUE — DO NOT USE!

Whether you use a nebulizer or an inhaler, don’t use the blow-by technique. “Blow-by” refers to the practice of directing the mist or “puff” from the nebulizer or inhaler toward the mouth and nose of the person receiving the treatment. As the name suggests, most of the medication blows right by and never reaches the person’s lungs. Even if the nebulizer or inhaler is placed ½-inch from the mouth and nose, most of the medication is lost to the surrounding air.