

## HOW TO USE A NEBULIZER

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**EQUIPMENT:** There are two primary components, a compressor and a nebulizer. The compressor is the machine that plugs into the wall and provides the air pressure to run the nebulizer. The nebulizer is the small plastic object that holds the medication; it is often called a medicine cup. All nebulizer bowls are not created equally, one study indicated as many as 50% of nebulizer bowls delivered little, if any, medicine even when new out of the box. Most nebulizer bowls are poorly functional after 30 days of use, and need to be replaced regularly. We recommend that all patients use the Pari-Jet nebulizer bowl, which delivers as much as twice the medication in half the time, and is guaranteed for 6 months.

How to Use Your Compressor:

1. Position the compressor on a table, at a height that you can easily reach from a sitting position.
2. It is important to always tighten the hose connector at the machine by turning it clockwise. If this is not tight it can result in a decrease or absence of the aerosolization of your medication.

Types of Medications:

1. Bronchodilator Drugs (albuterol, Xopenex, Proventil, Ventolin, Atrovent) ? These rescue medications cause rapid expansion of the bronchial tubes, thus allowing air to flow in and out of lungs freely. Tremor, jitteriness, and palpitations (heart pounding) are normal side effects of these drugs.
2. Inhaled Steroids (Pulmicort Respules) ? This is a prevention medication and does not work immediately, taking up to three months to have a maximum effect. Because Pulmicort is a steroid, three precautions must be followed to prevent side effects. The patient must wear a mask to avoid direct nebulization of medicines to the eyes (A small amount of medicine coming out of the vents in the mask is not a concern). The patient should also wipe the face to prevent a facial rash, and rinse the mouth or drink to prevent thrush.
3. Cromolyn Sodium (Intal) ? This is a non-steroid, low potency, prevention medicine that must be used four times a day to be effective

Taking Your Nebulized Treatment (Adult Method)

1. Exhale normally.
2. Begin treatment by placing nebulizer mouthpiece between your teeth (close mouth).
3. Hold the nebulizer as vertical as possible to prevent spilling of content or failure to nebulize.
4. As aerosol begins to flow, inhale deeply and take in a very slow (as if you were sipping hot soup) deep breath while keeping your finger over the finger valve.

5. At the end of your inspiration remove your finger or thumb from the finger valve, hold your breath as long as comfortably possible, up to 10 seconds, then exhale slowly.
6. Continue the treatment until your nebulizer begins to sputter, and then stop the treatment.

#### Mask Technique (Child Method)

1. Make sure the mask has a good fit on the face, especially on the nose to keep the medication from blowing directly into the eyes. The small amount of medication exiting through the vents in the mask is not a concern
2. If possible, have the patient take deep breaths in while medication is being nebulized.
3. Continue for at least 10 minutes or until your nebulizer begins to sputter.
4. If the child cannot or will not use a mask, hold the nebulizer 3 inches in front of the face. Do not allow a child to place a mouthpiece in his mouth, since it will cause fewer particles to get in the lungs and more particles to be swallowed. Pulmicort must be used with a mask to prevent side effects.

#### HOW TO CLEAN YOUR NEBULIZER

The cleaning of respiratory therapy equipment is a major necessity. An unclean nebulizer may result in a lung infection. To prevent this, simple routine is necessary.

#### BEFORE EACH TREATMENT

1. Wash your hands prior to each treatment.
2. When measuring medications, use a clean eyedropper or syringe. Be careful not to touch the top and thus contaminate it.
3. Replace bottle caps promptly. Be sure the cap is tightly closed. Once medication bottles have been opened, store them in the refrigerator. It is okay to keep most medications out of the refrigerator for short periods of time.
4. Before plugging machine into grounded outlet, make sure on/off switch is in off position.

#### AFTER EACH TREATMENT

1. Rinse nebulizer under a strong stream of warm water for thirty seconds.
2. Shake off excess moisture. Allow to air dry on a towel that is clean each time. Before storing your equipment you may want to be sure it is dry by attaching your nebulizer to your compressor (if you have one) and blowing it dry.

#### MONDAY-WEDNESDAY-FRIDAY/OR EVERY OTHER DAY

1. Wash nebulizer completely with a mild dish soap and warm water.
2. Rinse thoroughly under running, warm tap water.
3. Completely immerse nebulizer for thirty minutes in a solution of 1 part white vinegar and 2 to 3 parts water. Discard vinegar after each use. Alternatively, Control Three Respiratory disinfectant may be used.
4. Rinse nebulizer thoroughly under running, warm tap water for 1 minute.

5. Allow to air dry on a towel that is clean each time.
6. Keep the nebulizer, eyedropper (or syringe) clean and dry. Store in a closed plastic bag.
7. Your nebulizer will likely need to be replaced monthly, particularly if it is used daily, although the Pari-Jet Nebulizer is guaranteed for 6 months, and rarely fails prior to 12 months.
8. The Pari-Jet Nebulizer may be washed in the dishwasher. We recommend placing it in a larger basket prior to washing.

## Home Care of Your Compressor

### Routine Cleaning and Maintenance

1. Be sure the compressor is unplugged from wall outlet.
2. Wipe the compressor case off with a clean damp cloth.
3. Never submerge the compressor in water, as it will result in compressor damage.

### How to Change The Filter

1. Located next to the hose connection is a felt filter.
2. When the felt filter turns gray in color, replace it with a new filter.
3. Remove the felt filter by turning the black filter retainer cap counterclockwise.
4. Remove the filter by pushing it out with a blunt instrument.
5. Replace it with a clean felt filter pad and replace the cap on the machine
6. Do not use cotton or any other material as a filter or attempt to wash or clean the felt filter. This may damage your compressor