Patient Instructions

Small Volume Nebulizer
Orientation Checklist

During orientation, the following information will be discussed, demonstrated and, in return, demonstrated by you.

**Operation of the Nebulizer**

- □ How to prepare medication.
- □ How to set-up and operate the compressor.
- □ How to take treatment.
- □ How to assemble and disassemble the nebulizer.
- □ How to clean and disinfect the equipment.
- □ How to change the inlet filter.
- □ Have patient/caregiver demonstrate all of the above.

**Special instructions:**

- □
- □
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**Safety information:**

- □ Explain the importance of the manufacturer’s recommendation for grounding of all electrical equipment.
- □ Explain the importance of following cleaning procedures.
- □ Explain the Small Volume Nebulizer Patient Instructions.
- □ Explain how to contact the homecare provider for routine and after hours equipment problems.
- □ Explain how to obtain help if a medical emergency arises.
- □ Explain warranty information and how to obtain service for purchased equipment.
Small Volume Nebulizer
Patient/Caregiver Acknowledgement

Your homecare provider representative will review the items on this checklist with you. After you have reviewed each item, please check the appropriate box. Then sign and date at the bottom and remove the checklist from your manual.

1. Orientation Checklist
   a. Safety Information

2. Your Prescription

3. Components of Your Small Volume Nebulizer

4. Preparing Your Medication
   a. Measure Medication
   b. Mouthpiece and Mask Assembly

5. Operating Your Nebulizer

6. Taking Your Treatment

7. After Your Treatment

8. Cleaning Procedure
   a. After Each Treatment
   b. After the Last Treatment Each Day
   c. Twice Weekly Cleaning and Disinfection
   d. Filter Change

9. Physical Problems

10. Handwashing Technique

11. Safety Precautions

12. Common Problems and Solutions

13. Feedback on Our Services

The undersigned acknowledges that he/she has received, been instructed in, and understands the subjects shown on this page and covered in this booklet.

Patient/Caregiver Signature ______________________ Date _________

Homecare Provider Representative ______________________ Date _________

Please PRINT Name ______________________

Las Vegas Commercial Plant

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Your Prescription

Nebulizers are used to turn liquid medication into a mist so that it can be inhaled. Nebulizer therapy uses a prescribed drug. **Never increase your frequency of treatments or volume of medication without the specific approval of your physician.** Please note that the information provided here is meant to supplement the information provided by your physician, not to replace it. If your physician changes the frequency of treatment or medication volume, notify your homecare provider of this change in your prescription.

For more information on your illness or condition, the drugs used to treat them, and common equipment, please check with your homecare provider.

Equipment and Accessories

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<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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Components of Your Small Volume Nebulizer

Although nebulizer equipment may vary in appearance, most models contain the components shown below. **Note:** Your nebulizer or nebulizer cup may not look exactly like the ones shown here.

Typical Small Volume Nebulizers
Preparing Your Medication

Step 1: Select a comfortable area in your home where the unit can be placed and treatments can be taken without interruption.

Step 2: Plug the nebulizer power plug into the nearest AC power outlet. Follow the instructions on page 6 regarding grounded “3-prong” power plugs.

Step 3: Wash your hands as instructed on page 14.

Measure Medication

Step 1: If you have unit dose medication, proceed to step 5.

Step 2: If you do not use unit dose, use a clean measuring device for measuring your medication. An eyedropper or a syringe is the best measuring device. If either of the above does not come with your medication, ask your pharmacist to supply you with one.

Discard any medications or solutions that have:

- Changed colors
- Formed crystals
- Developed a strange color
- Gone beyond the expiration date

Replace your eyedropper when you receive a new bottle of medication.

Step 3: Always use caution when measuring your medication. Use the exact amount of each solution as directed by your physician or pharmacist. Fill your syringe or eyedropper to the line that indicates your dosage, then squeeze this amount into the nebulizer cup.
Preparing Your Medication (continued)

**Step 4:** If your medication is not premixed, measure the sterile normal saline in the same manner as you measured your medicine. **NEVER** use tap water to mix your medication. Tap water has impurities that may cause your respiratory condition to become worse.

*If you think that you have made a mistake in measuring, empty the medication and begin again.* If you are confused as to proper measurement, consult your physician or your pharmacist.

**Step 5:** Deposit medication in the nebulizer cup. Measure and add saline or sterile water if directed.

**Mouthpiece Assembly**

**Step 1:** Attach the lid to the nebulizer cup.

**Step 2:** Attach the T-piece to the lid.

**Step 3:** Place the mouthpiece in one end of the T-piece.

**Mask Assembly**

**Step 1:** Attach lid to nebulizer cup.

**Step 2:** Attach aerosol mask to lid of nebulizer cup.
Operating Your Nebulizer

Compressor

Step 1: Connect the nebulizer cup to the tubing. Be careful not to spill any of your medication from the nebulizer cup.

Step 2: Attach tubing to compressor.

Step 3: Insert the power plug into a nearby power outlet.

Note: Most small volume nebulizers use “2-prong” power plugs and do not require a 3-prong, grounded AC power outlet.

However, if the equipment that has been provided to you has a 3-prong power plug and your home does not have 3-prong power outlets, your patient service technician will exchange your nebulizer for a unit that utilizes the 2-prong plug.
Taking Your Treatment

**Step 1:** Position yourself comfortably in a sitting position that will allow you to take a deep breath.

**Step 2:** Turn compressor to “ON.”

**Step 3:** Check for steady mist.

Check to see that the nebulizer is creating a steady mist. If not, recheck the tubing attachment points at the nebulizer and the compressor. If the nebulizer still does not supply an adequate mist, use your spare nebulizer cup and call your homecare provider for a replacement.

**Step 4:** Place the mouthpiece between your teeth and on top of your tongue and inhale through your mouth. If you are using a mask, secure the mask on your face and inhale with your mouth open.

**Step 5:** Breathe normally through your mouth. Your physician may advise you to periodically inhale slowly and deeply with up to a 5 second breath hold. This will allow the maximum amount of medication to reach your lungs.

**Step 6:** Monitor for side effects. If you experience any of the following, stop your treatment.

- Increase in pulse by 20 beats per minute
- Palpitations (noticeable heart beat)
- Dizziness
- Shakiness
- Nausea
- Chest pain
- Uncontrollable coughing
Taking Your Treatment \textit{(continued)}

Rest for five to ten minutes. If the sensation goes away, continue with your treatment, but at a slower pace. If physical problems persist, consult your physician.

**Step 7:** Continue treatment until medication is gone.

Periodically tap the side of your nebulizer cup to cause any residual medication droplets to go to the bottom of the cup where they can be nebulized.

If you need to cough or rest during the treatment, turn the compressor off so you can save your medication.

**Step 8:** Store medication as directed.

Follow instructions on the medication label and refrigerate if required.

**Step 9:** Ask your pharmacist how long your medication can be used after being opened. Most medications are dated and have a specific expiration date. Ask your pharmacist to instruct you on your medication and saline usage time. Please note that any information or instructions provided here are meant to supplement, not replace, any special instructions provided by your physician or pharmacist.
After Your Treatment

**Step 1:** Turn the compressor off.

**Step 2:** If needed, cough several times to loosen and bring up any mucus.

**Step 3:** Clean the nebulizer unit using the instructions beginning on page 10.
Cleaning and decontamination of respiratory therapy equipment in the home is of major concern. To prevent equipment contamination, a simple but effective cleaning procedure must be carried out on a routine basis. Do all cleaning and disinfecting in a clean environment. Avoid doing it after vacuuming, under an open window, or in dusty, dirty or smoky areas.

**After Each Treatment**

*Step 1:* Wash your hands as instructed on page 14.

*Step 2:* Remove the mask/mouthpiece, hose/tubing and nebulizer cup.

*Step 3:* Disassemble the nebulizer cup and empty it.

*Step 4:* Rinse under a strong stream of warm water. **Note:** It is not necessary to wash the tubing.

*Step 5:* Shake off excess water.

*Step 6:* Place nebulizer parts on a paper towel to air dry. Cover with another paper towel to keep dust free.

*Step 7:* Once dry, reassemble for the next treatment.
After the Last Treatment Each Day

**Step 1:** Wash your hands as instructed on page 14.

**Step 2:** Remove the mask/mouthpiece, tubing and nebulizer cup.

**Step 3:** Disassemble the nebulizer cup and empty it.

**Step 4:** Wash disassembled parts in mild liquid detergent and warm water. **Note:** It is not necessary to wash the tubing.

**Step 5:** Rinse all the parts.

**Step 6:** Shake off excess water.

**Step 7:** Air dry parts between folds of paper towels or on a clean hand towel.

**Step 8:** Reassemble for use.

Twice Weekly Cleaning and Disinfection

**Step 1:** Wash your hands as instructed on page 14.

**Step 2:** Wash disassembled parts in mild liquid detergent and warm water.

**Step 3:** Rinse thoroughly.

**Step 4:** Soak the parts for 30 minutes in a solution of one part white vinegar and one part water for disinfecting.
Cleaning Procedure (continued)

Step 5: After soaking, rinse and shake off the excess water.

Step 6: If the equipment is not going to be used immediately, air dry between folds of paper towels or a clean hand towel. When thoroughly dry, store in a resealable plastic bag until ready for use.

To keep your nebulizer dust free, cover it with a clean towel when not in use. Do not store the nebulizer on the floor.

Filter Change

Unscrew the filter cap and replace the filter as instructed.
Physical Problems

If you experience any of the following problems, call your physician.

- Fever or chills
- Increased wheezing
- Increased mucus production
- Mucus becomes thicker
- Change in mucus color
- Headaches
- Loss of appetite
- Increased shortness of breath
- Chest pain
- Increased cough
- Swelling in your ankles or around your eyes
- Weight gain overnight
- Feeling dizzy or sleepy
- Any change in physical sensation after taking a new medication

If you are having trouble with your equipment call your homecare provider.

If you experience any physical change, call your physician.

If you experience severe physical problems, call 911.
Handwashing Technique

Hands must be clean prior to handling supplies and solutions. Wash hands before beginning any procedure.

Step 1: Wet hands thoroughly with warm water.

Step 2: Use antibacterial soap.

Step 3: Wash hands for one to two minutes using a rotary motion and friction. Wash:
- Back and palm of each hand
- Between all fingers
- Fingernails

Step 4: Rinse hands under running water.

Step 5: Dry on clean towel or with paper towel.
Safety Precautions

Never immerse the compressor unit in water.

Never try to clean the compressor by placing it in water. The electrical components will be damaged and will create a shock to the user the next time it is plugged into an electrical outlet.

Never plug in the compressor unit if the unit is wet or damp.

Moisture always increases the potential of electrical shock.

Always keep an extra nebulizer cup on hand.

It is possible, but not probable, that your nebulizer could stop working correctly just as you start using it. A spare nebulizer cup will allow you to continue with your treatment, should this occur.

Never use the compressor with an extension cord.

Never plug the compressor into an electrical outlet that is being used to supply power to another major appliance.

Plug your compressor into an outlet that is NOT being used to supply electricity to other major appliances. If you need to use the same outlet that is shared by other equipment, make sure the other appliances are NOT being used at the same time.
Safety Precautions (continued)

**Never try to repair the compressor yourself.**

Your compressor is considered medical equipment and should only be worked on by a professional. If you are having trouble with your equipment, call your homecare provider.

**Make sure your home address is visible.**

**Make sure your home address can be easily seen from the street during both day and night.**

If you are expecting a night delivery or visit, turn on the porch light. Check to see that your address numbers are easy to spot and read from the street. This will allow your homecare provider and emergency services to locate your residence easily.

**Follow emergency and natural disaster instructions.**

In an emergency or natural disaster, follow the radio or television instructions of your local authorities.

**Warranty**

If you have purchased your nebulizer compressor, the unit is under manufacturer’s warranty from the date you receive the unit. Call your homecare provider if your equipment needs service.
# Common Problems and Solutions

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<thead>
<tr>
<th>Problem</th>
<th>Probable Cause</th>
<th>Solution</th>
</tr>
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<tbody>
<tr>
<td>Medication is not making a mist.</td>
<td>Nebulizer cup is not properly assembled or is not clean.</td>
<td>Clean nebulizer cup and reassemble, or discard and use a new medication cup.</td>
</tr>
<tr>
<td>Compressor does not turn on.</td>
<td>Unit is not plugged in.</td>
<td>Plug in.</td>
</tr>
<tr>
<td>Medication leaks out of the nebulizer cup.</td>
<td>Nebulizer cup is cross threaded.</td>
<td>Unscrew cap from nebulizer cup and reassemble.</td>
</tr>
<tr>
<td>Compressor unit does not have enough flow.</td>
<td>Filter is dirty.</td>
<td>Replace and/or clean filter.</td>
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</table>
Feedback on Our Services

It is possible that you may have a concern and we welcome feedback. To voice a concern, you should call your local branch and ask to speak to the branch manager.

Satisfaction Survey Process

Our goal is to ensure your satisfaction. You will likely receive a patient satisfaction questionnaire and we hope that you will take a few minutes to fill it out and return it to us. The postage is prepaid by your homecare provider.
OK to proceed

Make corrections and proceed

Make corrections and show another proof

Signed: ___________________  Date: _________

Las Vegas Commercial Plant