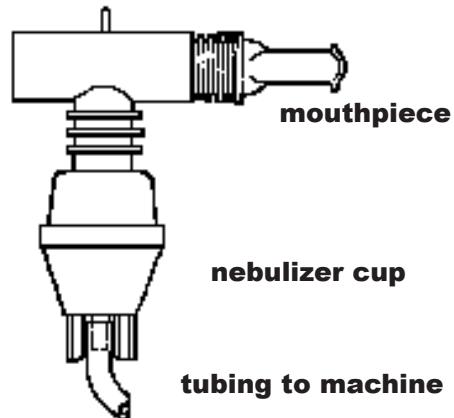


Name of Child: \_\_\_\_\_ Date: \_\_\_\_\_

# How to Use a Small Volume Nebulizer (SVN) Medicine by Mist

## What it is:

A fine mist of medicine can get deep into your child's lungs and start to work quickly. This mist is called an **aerosol**. It can help breathing problems. Your child inhales the mist through a mask or mouthpiece. When the medicine is breathed in correctly, it goes right into the lungs. The machine that mixes the medicine and turns it into a mist is called a **small volume nebulizer** or **SVN**.



Some children may be afraid of the mask or mouthpiece at first. When getting medicine by mist, your child may feel short of breath for a few minutes. Before using the SVN, let your child hold the mask or mouthpiece, look at it and try it on. Explain that it may "smell funny," but after he or she breathes the medicine, breathing will be easier.

Do not give more of this medicine than was prescribed.

Do not give this medicine more often than was prescribed.  
If the medicine does not work, call your doctor right away.

## You Need:

- small volume nebulizer (SVN)
- tubing
- nebulizer cups

- two masks or mouthpieces
- medicine
- if medicine is a bronchodilator, special liquid to mix it in (saline).

### **What to do:**

1. Wash your hands.
2. Gather the small volume nebulizer (SVN), tubing, the nebulizer cup, the mask or mouthpiece and the prescribed medicine.
3. Carefully measure the medicine and liquid (if medicine is a bronchodilator or if ordered) into the nebulizer cup. If you think you may have measured too much or too little, pour the medicine in a sink and start again.
4. Sit your child in a chair or on your lap.
5. Attach the tubing to the nebulizer cup. Attach the other end of the tubing to the SVN machine.
6. Turn the machine on.
  - If your child can hold the mask or mouthpiece alone, let him or her do it. If not, hold it on for your child.
  - Have the child take in a slow deep breath, then pause for two or three seconds, then slowly breathe the air out through almost closed lips.
  - A young child can get more medicine through a mask, than if the medicine was just blown near his or her face.
  - If your child is upset and cannot be calmed down, it is all right if your child cries during the treatment. Strong crying means good deep breaths.
  - If, in the middle of the treatment, you need to stop to get your child to cooperate, turn the machine off.
7. Most of the medicine will be given in twelve minutes. You may tap the side of the nebulizer cup to move the medicine to the bottom. If the treatment takes longer than 15 minutes, the machine may not be working right, or you may have used too much liquid.
8. Thank your child for helping (even if he or she gave you a hard time!)
9. Check your child's breathing. Did medicine help?  
If your child still has trouble breathing, call your doctor right away.



**If your child can hold the mask or mouthpiece alone, let him or her do it.**

## **After each treatment:**

1. Take apart the tubing from the nebulizer cup and SVN machine.
2. Shake off the extra medicine.
3. Let the tubing and nebulizer air dry in a place away from dust.

## **Every day:**

1. Take apart the tubing from the nebulizer cup and SVN machine.
2. Wash the nebulizer cup in warm water and dish washing liquid.
3. Rinse the nebulizer cup in warm water.
4. Put some 70% isopropyl alcohol in a clean bowl.
  - This is only good once.
  - Do not use this alcohol again.
5. Put the nebulizer cup in the alcohol. Make sure it is covered completely in the alcohol. Keep it in the alcohol only 5 minutes. Use a timer.
6. Rinse the nebulizer cup well in sterile water.

See handout #861, **How to Make Sterile Water and Sterile Saline**  
Boil water for 5 minutes to make it sterile.
7. Let it air dry in a place away from dust.
8. Store the nebulizer cup in a plastic bag or container.

## **Every month:**

1. Take apart the tubing from the nebulizer cup and SVN machine.
2. Wash the nebulizer cup in warm water and dish washing liquid for a few minutes.
3. Rinse the nebulizer cup in warm water.
4. Put some 70% isopropyl alcohol in a clean bowl.
5. Put the nebulizer cup in the alcohol. Make sure they are covered.

Keep them there for 30 minutes.
6. Rinse the nebulizer cup well in warm water.
7. Let them air dry in a place away from dust.
8. Store them in a plastic bag or container.
9. Replace the filter if it is dark brown. Replace the nebulizer cup if it cracks or changes color. You may get replacement filters and nebulizers from your home health company. (To find out who is your home health company, call your insurance company.)

## Now that you've read this:

- Tell your nurse, doctor, or respiratory therapist why aerosol is a good way to give breathing medicine. (Check when done.)
- Tell your nurse, doctor, or respiratory therapist why the nebulizer cup and tubing are washed in an alcohol and water mixture. (Check when done.)
- Tell your nurse, doctor, or respiratory therapist why the nebulizer cup and tubing need to air dry in a place away from dust. (Check when done.)
- Tell your nurse, doctor, or respiratory therapist what you would do if your child took in all the medicine in the nebulizer cup, but was still feeling tight and short of breath. (Check when done.)



If you have any questions or concerns,

- call your child's doctor or     call \_\_\_\_\_

If you want to know more about child health and illness,  
visit our library at The Emily Center at Phoenix Children's Hospital  
1919 East Thomas Road  
Phoenix, AZ 85016  
602-933-1400  
866-933-6459  
[www.phoenixchildrens.org](http://www.phoenixchildrens.org)  
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### Disclaimer

The information provided at this site is intended to be general information, and is provided for educational purposes only. It is not intended to take the place of examination, treatment, or consultation with a physician. Phoenix Children's Hospital urges you to contact your physician with any questions you may have about a medical condition.

September 4, 2014 • DRAFT in family review  
#31 • Written by Jan Miller, RN • Updated by Annette Gong, MS, RN and Ron Evans, RT  
• Illustrated by Dennis Swain  
This handout is also available in Spanish as #106/31s.

## How to Use a Small Volume Nebulizer

Name of Health Care Provider: \_\_\_\_\_  
Date returned: \_\_\_\_\_  db

### Family Review of Handout

Health care providers: Please teach families with this handout.  
Families: Please let us know what you think of this handout.

Would you say this handout is hard to read?  Yes  No  
easy to read?  Yes  No

Please circle the parts of the handout that were hard to understand.

Would you say this handout is interesting to read?  Yes  No  
Why or why not?

Would you do anything differently after reading  
this handout?  Yes  No

If yes, what?

After reading this handout, do you have any  
questions about the subject?  Yes  No

If yes, what?

Is there anything you don't like about the drawings?  Yes  No

If yes, what?

What changes would you make in this handout to make it better or easier to understand?

Please return your review of this handout to your nurse or doctor or send it to the address below.

The Emily Center  
Health Education Specialist  
Phoenix Children's Hospital  
1919 East Thomas Road  
Phoenix, AZ 85016-7710  
602-933-1395

# Thank you for helping us!