

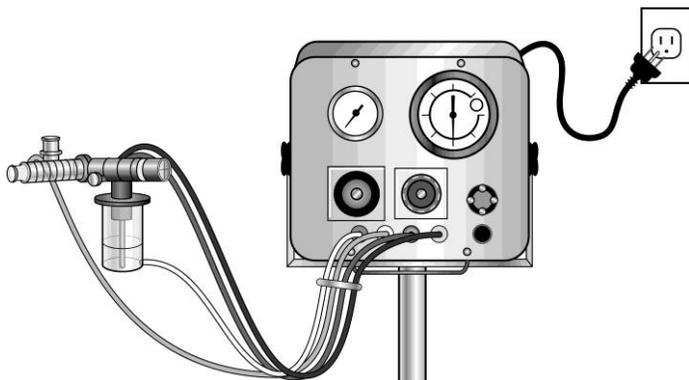
## IPV Therapy

Intrapulmonary percussive ventilation (IPV) is a treatment that helps to remove mucus from the lungs. This treatment is given through a mouthpiece. It combines moisture in the form of a mist with small bursts of air. These small bursts help to shake the mucus loose so that you can cough it out more easily. The mist helps to make your mucus moist.

The part of the IPV machine that makes the mist is called the nebulizer. Sometimes medicines, in liquid form, can be added to the nebulizer to help make the treatment work better. Your doctor feels you need this treatment because you need help clearing the mucus from your lungs.

### Technique

1. Before starting the treatment, wash your hands with soap and warm water, or use anti-bacterial hand gel, to decrease your risk of infection.
2. Add saline to your nebulizer. Saline is a specific form of water used in nebulizers. Never fill your nebulizer with tap or distilled water. If you use medicine with your IPV treatment, add it to the saline. Fill the cup to the 20cc line.



3. Put your IPV circuit together as you learned from your respiratory therapist. See the diagram. All connections are color coded to make it easier. Green tubes attach to green parts of the nebulizer and IPV machine, yellow to yellow, etc.
4. Turn on your air IPV machine. The IPV should now be making a mist.
5. Place the mouthpiece in your mouth and press down on the silver thumb switch to start the mini breaths. Breathe in the mini breaths for as long as you can. Try not to let your cheeks fill with air. If your cheeks get tired, you can rest by taking your finger off the thumb switch and just breathe in the mist. You can push the thumb switch again when you are ready.
6. Cough during your treatment. If you do not feel the urge to cough during the treatment, we ask that you do a “huff” cough about every five minutes while you are doing the treatment.
7. A huff cough is done by taking a deep breath and holding it for 1-3 seconds. Then force the air out of your lungs with your mouth open like you would do if you were trying to fog a mirror.
8. Your treatment lasts 20 minutes or until your cough is no longer helpful. If you have added medicine to the nebulizer, make sure all the liquid is gone before you stop the treatment.

9. After the treatment is complete, take the medicine cup apart. Allow it to air dry on a clean paper towel.

### **How do I clean and disinfect the IPV?**

All your IPV parts must be cleaned and disinfected twice a week. There are 2 ways to clean and disinfect an IPV: by hand or heat methods.

### **How do I clean and disinfect by hand?**

To clean and disinfect by hand, you can use either vinegar and water method or rubbing alcohol method. **If you have cystic fibrosis (CF) do not use the vinegar and water method.**

### **Vinegar and Water Method**

1. Take the IPV apart. Wash the pieces in warm soapy water.
2. Rinse with hot tap water.
3. Place the IPV pieces in a bowl and add enough of the vinegar and water mixture to cover the pieces. Make the mixture of 1 part white vinegar (5% solution from your grocery store) to 2 parts water (1 cup vinegar to 2 cups water).
4. Soak the IPV pieces for 30 minutes to 2 hours.
5. Rinse all the parts of the IPV with **sterile water**. Do not use water from the faucet, bottled, or distilled water. It could be contaminated. You can make water sterile by boiling it for 5 minutes. Use this water once and throw it out.
6. Place the IPV pieces on a paper towel to dry.

### **Rubbing Alcohol Method**

1. Take the IPV apart. Wash the pieces in warm soapy water.
2. Rinse with hot tap water.
3. Place the IPV pieces in a bowl and add enough rubbing alcohol (isopropyl alcohol) to cover the pieces.
4. Soak the IPV pieces for 5 minutes.
5. Rinse all the parts of the IPV with **sterile water**. Do not use water from the faucet, bottled, or distilled water. It could be contaminated. You can make water sterile by boiling it for 5 minutes. Use this water once and throw it out.
6. Place the IPV pieces on a paper towel to dry.

### **How to Clean and Disinfect in the Dishwasher**

1. Take the IPV apart.
2. Place the pieces in a dishwasher basket on the top rack of the dishwasher.
3. After the dishwasher cycle is done, remove the pieces and shake out the extra water.
4. Air-dry the IPV pieces on a paper towel.

### **Who to Call**

If you have questions or need more supplies, call your home equipment provider.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright ©11/2019. University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#4297.