Positive Expiratory Pressure (PEP)

PEP stands for positive expiratory pressure. PEP valve is a treatment that helps to remove mucus from the lungs. It can also prevent lung collapse or open up areas that have collapsed.

How to do a PEP valve Treatment
1. Before beginning the treatment, wash your hands with soap and warm water, or use anti-bacterial hand gel, to reduce the risk of infection.
2. Make sure that the dial is set to the correct range ordered by your doctor.
3. Sit with your elbows resting on the table or sit upright.
4. Make a tight seal around the mouthpiece with your mouth. If you are using a mask, apply the mask tightly over your nose and mouth.
5. Take a deep breath in through your nose.
6. Hold your breath for 2-3 seconds. This allows the air to move through the lungs.
7. Breathe out into the PEP valve. Keep your cheeks hard and flat while you are breathing out.
8. During the time that you are breathing out, you will feel resistance. This is positive pressure in your airways.
9. You should breathe out 3-4 times as long as you breathe in, keeping the blue button between the black lines.
10. Repeat the steps above until you have blown through the PEP valve 20 times.
11. Remove the mouthpiece and perform a “huff cough”. This 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.
12. Continue steps 2-10 for a total of _______ minutes as ordered by your doctor.
13. **Note:** It is vital to pace yourself as you breathe out into the PEP valve device. Pause for a few seconds between breaths. If you feel dizzy or get a headache while using the PEP valve, you may be breathing too fast. If you get these symptoms, stop using the PEP valve for a few minutes and breathe as normal. When you begin to use the PEP valve again, take more time between breaths.

14. Your doctor has ordered the therapy ______ times per day at setting level________.

**Using the PEP Valve with Your Nebulizer**

PEP valve also improves how nebulized bronchodilators work. A bronchodilator is a drug that helps to relax the smooth muscles in the lungs to make breathing easier. Your PEP valve can be used at the same time you are doing your nebulizer treatment. Follow the set-up picture below.

**Cleaning the PEP Valve**

The PEP valve should be cleaned twice weekly or more often if it is soiled.

1. Take the PEP valve apart and soak all of the pieces except the tubing and “blue indicator column” in warm soapy water for five minutes.

2. Rinse all of the parts with hot tap water. Then place them in a bowl with enough rubbing alcohol (isopropyl alcohol) to cover the PEP valve. Soak the PEP valve device in alcohol for five minutes.

3. Remove the PEP valve from the alcohol and rinse with sterile water. **Do not use water from the faucet, bottled or distilled water.** You can make water sterile by boiling it for 5 minutes and allowing it to cool. Use this water once, then throw it out.

4. Place all of the parts on a paper towel to dry.
Cleaning Your Nebulizer
If you are using the PEP valve with a nebulizer, please clean the nebulizer at the same time that you clean your PEP valve. Please refer to the Small Volume Nebulizer Health Facts for You #6922 for cleaning guidelines.

Return Clinic Appointments
Please bring your PEP valve with you to clinic visits.

Hospital
Please bring your PEP valve to the hospital if you are admitted.

Equipment
If you have questions or need more supplies, contact your Home Health Equipment provider.

The Spanish version of this Health Facts for You is #7045

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 ©3/2017 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#4913