

# Patient Information Leaflet

## Physiotherapy Department

# Positive Expiratory Pressure

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Positive expiratory pressure (PEP) is a technique that applies a “back pressure” to the airways during the breath out. This helps to keep them open wide and allows air to get behind sputum (phlegm) and help move it upwards.

A number of PEP devices are available, some have a mask and some a mouthpiece.

The PEP device gives some resistance to the breath out and this resistance splints open the airways. The amount of resistance can be altered to ensure that an adequate pressure is being used.



Please refer to the video link on YouTube to follow the technique (PLYMOUTHNHSPHYSIO):

<https://www.youtube.com/watch?v=O2ROWYz5cyg>

## Using the PEP

- You can use the PEP in sitting, lying down or any other postural drainage positions as advised.
- Do a few relaxed slow breaths before using the PEP.
- Make sure you form a tight seal with your lips around the mouthpiece.

- Keep your cheeks held in to get maximum resistance felt in your lungs.
- Take a breath in through your nose slightly bigger than normal but not a full deep breath.
- Breathe out through the PEP but not forcing the air out.
- Breathe out for approximately 3-5 seconds so that you can feel some back pressure in your chest.
- Breathe out as far as comfortable but do not breathe all the way out.
- Try to suppress your cough.
- Repeat 8-10 breaths. Rest after 3-4 breaths if breathless.
- Do a few more relaxed slow breaths without the PEP.
- Then huff as directed 1-2 times.
- Repeat this for 10-15 minutes in the position advised by your Physiotherapist or until you have cleared all your sputum.

Bubble PEP is another modification of PEP. It uses exactly the same action as PEP described above, but instead of using a mask or mouthpiece you can blow out through a length of plastic tubing placed in a bottle of water. You can also add soap to produce lots of bubbles.

## **How often?**

- Try to use your PEP twice daily or as directed by your Physiotherapist.
- If you are unwell or have an active chest infection you may need to increase this to 3-4 times per day to clear the excess secretions in your lungs.

- If you are unwell and using the PEP several times a day you may need to reduce how long you do it for each time to avoid getting too tired.

## **Cleaning the PEP**

- After each use take apart your PEP into pieces.
- Wash it in warm soapy water and rinse thoroughly with clean water.
- Allow parts to air dry.

## **Sterilising**

- Your PEP should be sterilised at least once a week.
- Sterilise it by putting the PEP in a clean bowl of boiling water.
- PEP can also be steam sterilised.
- Do not microwave.

## **Storing**

- Do not store the PEP on a windowsill or direct sunlight.
- Place it in the bag provided or in a clean plastic container.
- Store it in a dust free environment.

If you have any adverse reaction, stop using the PEP and seek medical advice.

**Please use this technique only if assessed and advised by a Physiotherapist.**

This information sheet is available in large print and other formats and languages. Please contact:  
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