

Airway Clearance Physiotherapy: Baby PEP

Airway clearance is an essential part of the treatment routine for people with CF. Performing regular airway clearance helps loosen the thick, sticky mucus from the airways so it can be cleared more easily with huffing and coughing.

What is Positive Expiratory Pressure?

Positive Expiratory Pressure (PEP) is a technique that involves actively breathing out against resistance to help keep airways open and get air behind mucus. This helps to unstick mucus from the airway walls and move it up towards the mouth where it can be cleared. PEP can be used for babies who have floppy airways or as an independent technique as children get older.

Baby PEP

PEP mask therapy for infants and small children will be different for each child. PEP is introduced gently in this age group, under the guidance of a hospital physiotherapist, and with lots of positive reinforcement and encouragement. They will choose a mask to fit your child and attach the three way valve. A resistor will be chosen that allows your baby to breathe comfortably while generating pressure in the airways and lungs.

It may take a number of months for PEP mask therapy to become an effective treatment as it is gradually introduced and incorporated into the routine of daily physiotherapy. It is important to follow the advice of your hospital physiotherapist about whether to continue with alternative physiotherapy techniques while the transition to PEP mask therapy occurs.



How is baby PEP done?

Your physiotherapist will teach you how to introduce the technique with your baby at home. An example of the technique may be as follows:

- Sit your baby on your lap with one of their arms tucked around your back and their head resting on your upper arm.
- You may like to hold their free hand with the hand of your supporting arm.
- Hold the PEP mask against your baby's face, covering the nose and mouth to create a seal, ensuring there is no air leak around the mask. Your baby will breathe as normal on the mask.
- You might like to distract your baby with singing or talking or get someone to help you while they get used to the mask.
- In the beginning, aim for just a few breaths with the mask on, followed by a rest, whilst your baby gets used to the treatment.

- Try to remove the mask before your baby becomes distressed, gradually increasing tolerance until the goal time is reached. This will be different for each child and will be determined by your hospital physiotherapist.

Cleaning your PEP device

PEP devices should be cleaned after each use by disassembling and washing in warm, soapy water. Equipment should then be rinsed under warm running water and left to air dry before storing.

Support

If you would like support with airway clearance routines at home, please contact CFWA on services@cfwa.org.au.

Useful resources

- [Airway clearance for infants](#) (CF Physio)
- [Airway clearance factsheets](#) (CFWA)
- [Information for new parents booklet](#) (CFWA)
- [Support programs](#) (CFWA)