Bubble PEP Advice

What is Bubble PEP?

PEP stands for **Positive Expiratory Pressure**.

Bubble PEP is a fun way of creating positive expiratory pressure and can be used as part of your physiotherapy (airway clearance) routine.

PEP is a way of keeping the smaller airways in your lungs open even after you have breathed out as fully as you can. Keeping the smaller airways open makes it easier to clear sputum from your lungs.

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**What you will need**

- A two pint plastic bottle
- 35-40cm of wide tubing
- Washing up bowl
- Soap / Washing-Up Liquid/Bubble Mixture
- Food colouring (as an extra to make it colourful!)

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Setting up Bubble PEP:
1) Fill the 2 pint bottle with 1 pint or 10cm of water.
2) Add some liquid soap / washing-up liquid / bubble mixture to the water, and some food colouring if desired.
3) Place the bottle in a washing up bowl to catch the bubbles and water.
4) If possible place the tubing down the handle of the bottle.

The Technique

Step 1: Sputum loosening and motion
■ Take a nice deep breath in.
■ Slowly blow out through the tubing for as long as possible.
■ Keep the breath slow and controlled.
■ Bubbles will rise over the top of the bottle as you blow out through the tubing.
■ Repeat these controlled breaths _____ times and then move onto step 2.

Step 2: Sputum removal
■ Take a medium sized breath in.
■ Follow with a forced but not violent breath out, keeping your mouth and throat open – just as if trying to steam up a mirror with your breath.
■ This is known as a huff.
■ Perform a huff once or twice.
■ Follow this with a strong cough and clear any loose sputum from your chest.
■ Try to clear any sputum into a pot or tissue rather than swallow it if possible.

Repeat the cycle of step 1 and 2 ______ times.

Cleaning the Equipment
■ The plastic bottle should be washed thoroughly with soap and water prior to first use.
■ You should use a new piece of tubing for each session of bubble PEP or alternatively change the tubing daily.
■ The plastic bottle should be washed thoroughly with soap and water after each use.
■ The bottle can also be sterilised using Milton.
■ Leave the bottle to dry completely after each session to avoid any condensation or water droplets which may harbour bacteria.
■ Replace your bottle as often as you are able, but it must be changed at least once a week.
Risks
The risks associated with using bubble PEP are incredibly rare but if you notice any blood (red flecks) in your child’s sputum or if your child becomes suddenly breathless or has chest pain, please stop and let the nursing staff or physiotherapy team know.

Contacts
Paediatric physiotherapists:

01392 411611 (switchboard) – bleep 168

Physiotherapy Prescription

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