What are the Active Cycle of Breathing Techniques (ACBT)?

ACBT is one way to help clear sputum from your chest. It is a set of breathing exercises that loosens and moves sputum from your airways. The technique consists of breathing control, deep breathing and huffing. These are repeated in a cycle until your chest feels clear. You can carry out ACBT when either sitting or lying down. Your physiotherapist will discuss this with you during your physiotherapy assessment.
1. Breathing control

Breathing control is breathing gently, using as little effort as possible.

- Rest your hand on your rib cage/upper abdomen. Feel your upper abdomen rising under your hand as you breathe in and falling as you breathe out.
- Try to breathe in through your nose then out through your nose or mouth.
- Breathe at a rate which feels comfortable; the rate will slow as you relax.

2. Deep breathing exercises

This helps loosen secretions.

- Take 3 to 5 long, slow, deep breaths in, through your nose if you can.
- Pause at the end of each breath in for 2-3 seconds, then breathe out gently through your mouth, like a sigh. Try to keep your shoulders and chest relaxed.

You should repeat steps 1 and 2 several times before moving on to step 3.
3. Huffing

A huff is a way of exhaling your breath forcefully out through your mouth, but without coughing. There are two types of huff:

1. **Medium volume huff** – this helps to move secretions that are lower down in your airways. Take a normal sized breath in and then an active, long breath out until your lungs feel quite empty. Imagine you are trying to steam up a mirror.

2. **High volume huff** – this helps move secretions in your upper airways. Take a deep breath in, open your mouth wide and huff out quickly.

   - Only perform 1-2 huffs together, as repeatedly huffing can make your chest feel tight.

   - Listen for ‘crackles’ when you huff. If you hear these, you may now need to cough and clear secretions; try to spit them out into a tissue or pot. Try to avoid excessive coughing as this may reduce how effective the technique is and make it excessively tiring.

**Repeat the whole cycle for about 10-15 minutes or until your chest feels clear.**

**How often do I need to do ACBT?**

Clearing your chest should be done one to two times a day when you feel well. If you are unwell, particularly if you are producing more secretions and coughing more, it is best to add another session and/or increase the length of time you are doing the technique.
4. The cycle

If, after practising ACBT regularly, you feel it is not effective to help you clear your secretions, or you have any other questions, please contact your physiotherapist. They may be able to help you to adjust your technique or suggest an alternative method, if needed.
If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call **01865 221 473** or email **PALSJR@ouh.nhs.uk**

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