



**Royal Papworth Hospital**  
NHS Foundation Trust

# Active cycle of breathing techniques

A patient's guide

Clearing excess chest secretions, using an effective method at a convenient time, can:

- Help reduce the number of infections
- Enable you to breathe more freely, especially during exercise and everyday activities
- Help to reduce the need to cough and clear secretions at other times of the day

ACBT is one effective method of clearing secretions that you may find useful, and is much less tiring than lots of coughing. It consists of three different components:

1. **Breathing Control (BC) or relaxed breathing**

Keep your shoulders and tummy as relaxed as possible. Your breathing should sound quiet. Breathe in and out at a comfortable pace. Repeat until your breathing feels settled and comfortable.

2. **Thoracic Expansion Exercises (TEE) or deep breathing**

This helps to loosen the secretions. Take a long, slow deep breath in and hold for a second. On the breath out relax and let the air come out in its own time. Repeat approximately four times.

3. **Forced Expiration Technique (FET) or huffs and BC**

This is a controlled way of moving secretions. It is the active part of the cycle where you push the air from your lungs, out through an open mouth and throat, much the same way as if you were trying to steam up a mirror. It is followed by a period of breathing control.

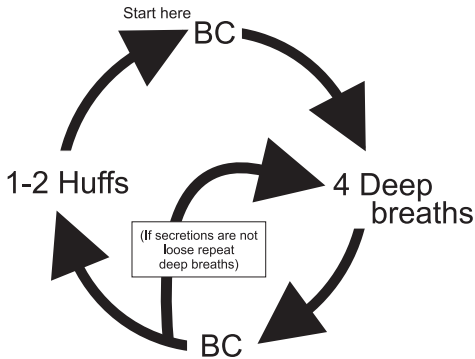
There are two different types of huffs that will help remove secretions from different parts of your lungs:

1. **High volume huff** - will move secretions that are high up in your larger airways. Take a deep breath in, open your mouth wide and huff the air out quickly.
2. **Medium volume huff** - will move secretions that are lower down in the airways. Take a normal sized breath in, open your mouth wide and do a longer huff out until your lungs feel nearly empty.

You may need to cough after the huff to expectorate the phlegm, but try to avoid excessive coughing.

These different parts are put together to form a cycle; see the diagram below. The cycle can be adjusted to suit your own needs; please discuss this with your physiotherapist.

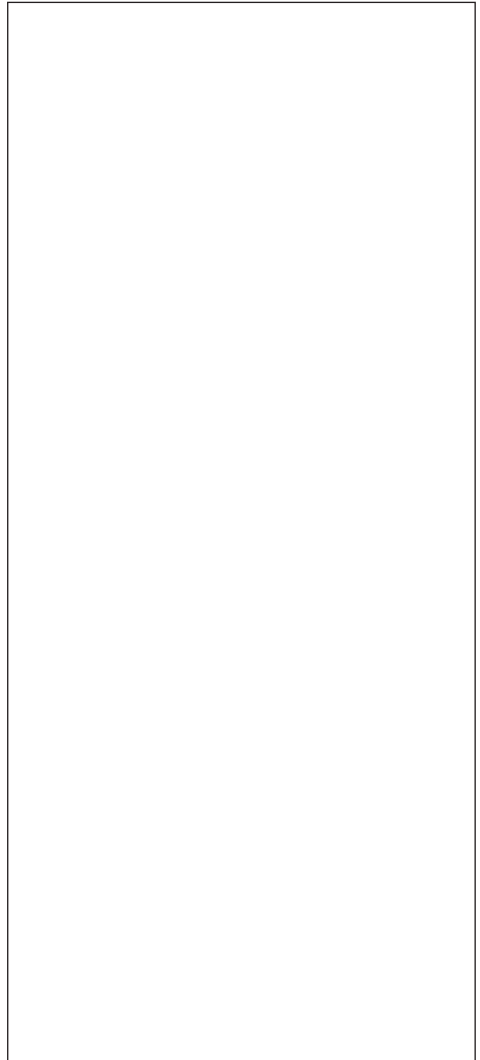
### Points to remember



1. If you use a bronchodilator inhaler or nebuliser, take this before you clear your chest.
2. Make sure your fluid intake is adequate. If your secretions are very sticky and/or thick you probably need to drink more.
3. Only do one or two huffs at a time and try to avoid bouts of coughing otherwise you may make yourself feel more wheezy or breathless.
4. Do not do your airway clearance straight after a meal.
5. Always allow yourself enough time to complete your routine.

6. You may need to clear your chest for shorter sessions, more frequently, when you are unwell.

It may be useful for you to combine ACBT with different positions to optimise your airway clearance. See your special instructions below:



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