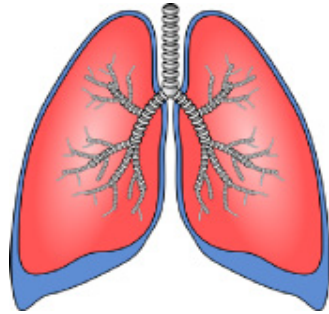


# A Guide to Airway Clearance Techniques in Young Adults



## Background

- Clearing excess mucous or “secretions” is important, at any age, to ensure our lung function is as good as possible.
- Secretions can act as a barrier to gas exchange and can reduce the amount of oxygen being transferred into the blood.
- Sometimes it can be difficult for children and young adults to clear their secretions. Especially if they have a diagnosed respiratory/neuromuscular condition or even a chest infection.
- As children turn into young adults, the way in which Respiratory problems are treated can be adapted to ensure treatment fits in to their day to day lives.
- This leaflet is designed to give some ideas for parents to use to aid secretion clearance.

The Active Cycle of Breathing technique is probably the most commonly used treatment for chest clearance however other things can be added alongside this. Your Physiotherapist will be able to guide you on a specific treatment plan for each individual and give you more information.

For more information regarding secretion clearance, please speak to your child’s Physiotherapist. For more information on Cystic Fibrosis, visit the Cystic Fibrosis Organisation website.

This leaflet has been designed as a reminder for common techniques recommended by Physiotherapists, please do not use this as a guide to treat your child without first receiving Physiotherapy advice.

All information used in this leaflet was gained from the Cystic Fibrosis Trust (2017)- Physiotherapy Airway Clearance techniques. This can be accessed via the CF trust website: [www.cysticfibrosis.org.uk](http://www.cysticfibrosis.org.uk)

## Active Cycle of Breathing Technique (ACBT)

### Breathing Control

This can be used to help relax breathing.  
This exercise should focus on “tummy breathing”.  
You should be looking for tummy coming out on a breath in.



### Thoracic Expansion

Also known as deep breathing exercises. Emphasis on a slow, deep breath in. Once lung capacity is reached the breath should be held in for 2-3 seconds, before slowly breathing back out.  
Aim to complete 3-4 breaths before moving on.

### Forced Expiratory Technique (FET)

FET involves a “huff” out, forcing the air out of the lungs. An easy way to get the technique is to imagine you are trying to steam up a mirror.  
This will help to move secretions up the windpipe to make easier to clear.  
2-3 huffs is sufficient per cycle. This can then be followed by a cough.  
The cycle can be repeated 2-3 times depending on the amount of secretions being cleared.



## Positioning and Postural Drainage

Positioning and postural drainage can still be used in older children and young adults however can be difficult to comply with. A Physiotherapist will be able to guide you on positioning. This can help move secretions towards the middle of the lungs so they are easier to clear.



## Percussion and Manual Techniques

- Percussion– “patting” the individuals chest with a cupped hand.
- Vibrations/Shaking– varying frequency vibrations created by your hands over the individuals chest wall.

These can help to loosen secretions and move secretions higher up the airway, making them easier to be coughed up. This is sometimes not tolerated very well in older children but may be an important part of treatment. Again your Physiotherapist will be able to instruct you on specific treatments.

## Other Adjuncts

- **PEP mask**

“Positive Expiratory Pressure” will provide resistance to expiration to create a backpressure in the lungs to keep airways splinted open and make secretions easier to clear



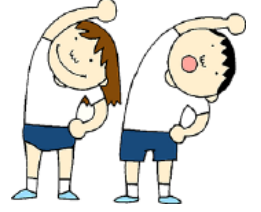
- **Acapella**

Again provides resistance to forced expiration but creates a vibration loosening secretions so they are easier to clear. Similar devices are the flutter, cornet or aerobica.



- **Exercise**

Really important for the respiratory system to ensure you are taking deep breaths. This doesn't always have to be intense exercise but things like walking and low intensity exercises regularly are really important.



- **Inhalation Therapy**

Sometimes Doctor's may prescribe different nebuliser's which will be administered as a “steam” you breathe in. There are a variety of different types but they may be important to time alongside Physiotherapy sessions. Your Doctor/Physio will advise you on this.

**If you have any comments about this leaflet or the service you have received you can contact :**

Physiotherapy  
Acute Inpatient Therapy  
Calderdale Royal Hospital  
Telephone No: 01422 224198  
www.cht.nhs.uk

**If you would like this information in another format or language contact the above.**

Potřebujete-li tyto informace v jiném formátu nebo jazyce, obraťte se prosím na výše uvedené oddělení

Jeżeli są Państwo zainteresowani otrzymaniem tych informacji w innym formacie lub wersji językowej, prosimy skontaktować się z nami, korzystając z ww. danych kontaktowych

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برائے مہربانی مندرجہ بالا شعبے میں ہم سے رابطہ کریں۔

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