



Northumbria Healthcare
NHS Foundation Trust

Advice on how to help clear your secretions

Issued by the Physiotherapy Department

Introduction

This leaflet aims to help you understand why it is important to cough and how to cough most effectively.

Why we must learn to cough

- The lining of your lungs are continually producing fluid (secretions).
- These secretions form part of your lungs cleaning mechanism.
- Under normal circumstances the body can cope well with clearing these secretions.
- Infections can cause excessive secretions.
- In certain conditions, such as Chronic Obstructive Pulmonary Disease (COPD) and Bronchiectasis, or in conditions that weaken the immune system or following surgery, the secretions may increase and become more difficult to clear.
- Secretions that are slow to clear may become prone to infection and chronic infection can lead to lung damage.
- Coughing can help to clear excess secretions.
- If you feel you have secretions to clear you may be tempted to do some strenuous coughing to try and clear them. You may find this tiring, ineffective and a little painful.
- It is therefore important to learn how to clear your secretions effectively.

General advice

- If you have a condition that causes an excess of secretions then you may find that regular use of the techniques described in this leaflet can help you look after your lungs by keeping the airways open and as clear of secretions as possible.
- Perform the exercises at a time when you are not tired or in a hurry.

- When possible, clear your secretions after using your nebuliser or inhaler.
- Make sure you drink plenty of fluid to avoid dehydration. This can cause sticky secretions that are more difficult to cough up.
- In general the following exercises should be practised in a comfortable position with your back and arms well supported, or sitting, leaning forward with your arms on your knees or on a pillow on a table in front of you.
- Occasionally other positions may help improve your breathing or increase drainage of secretions from particular parts of your lungs, (known as postural drainage). These positions may include lying on your side, either flat or with your shoulders raised up supported on pillows. Your physiotherapist will be able to advise you on the most effective position for you.
- Being as active as possible and moving around will help to loosen secretions.
- Having read this leaflet your physiotherapist will be able to give you any further advice.

The “active cycle of breathing”

This is a technique developed to allow you to clear the excess secretions with the minimum of effort. In a comfortable and well supported position carry out the following steps:

Step 1: Breathing control

- First relax and spend some time breathing quietly and slowly. Try to expand the lower part of your chest rather than lifting the upper chest.
- At the end of the breath out try and pause briefly before breathing in again, but do not hold your breath.

Step 2: Abdominal breathing

- Increase the depth of your breathing by slowly taking 3 or 4 longer breaths in through your nose, trying to breathe down to the bottom of your ribs.
- Let your stomach move out as you breathe in.
- You may find it helpful to place one hand on your upper chest and the other on your stomach to help identify where most of the movement is taking place.
- Aim to produce more movement at the stomach.
- As you breathe out, let your chest relax and gently sigh out through an open mouth. Do not force the air out.
- After taking a deep breath in, try and hold it for 2-3 seconds to help increase the air to your lungs (don't worry if you are unable to do this).
- Return to your quiet, slow, relaxed breathing control.

Step 3: Huffing or “forced expiration technique” (FET)

This is used to help move secretions from smaller airways in your lungs to larger airways from where they can be more easily cleared.

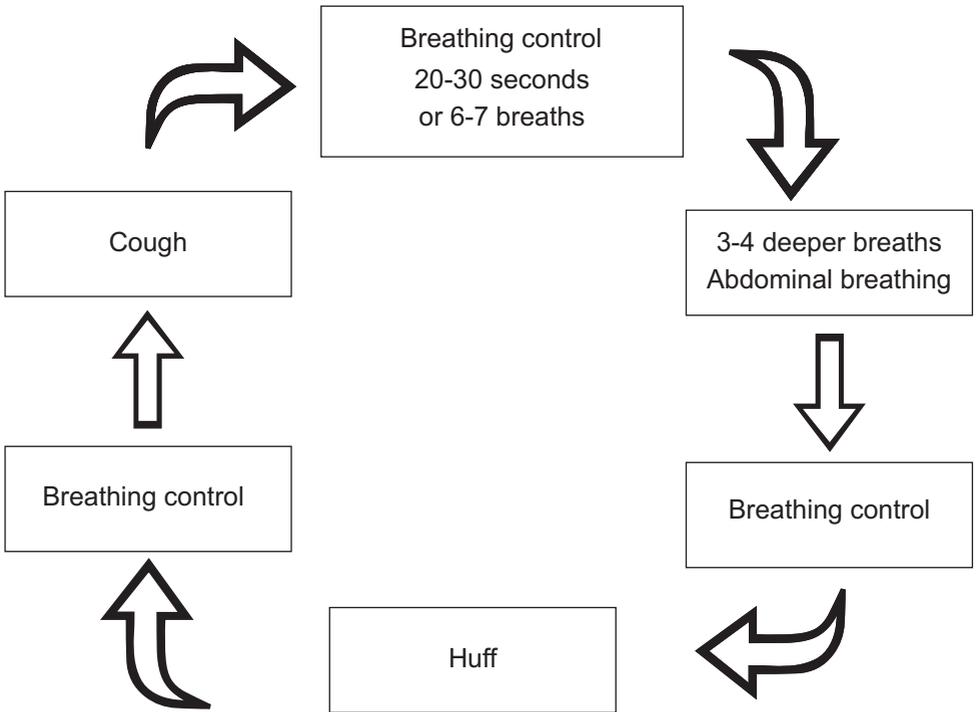
- Follow step 1 then take a medium-sized breath in and then force the air out through an open mouth using a short, sharp huff, as if trying to steam up a mirror or glasses to clean them.
- Repeat this once or twice more and then return to breathing control as in step 1 for at least 20-30 seconds (about 6-7 breaths).
- The huffing technique may then need to be repeated, gradually increasing the depth of the breath taken in to move the secretions from the smaller airways to the larger airways to cough up. Take a small breath in for a low volume huff, a medium breath in for a medium volume huff and then a big breath in for a large volume huff.

- After every 2-3 huffs you must always return to breathing control as described in step 1 to prevent the airways from becoming tight and the technique becoming too tiring.

Step 4: Coughing

- Once you feel your secretions have loosened and you are ready to clear them, but they have not cleared by huffing, you may need to give a short, sharp cough once or twice to clear these secretions.
- Coughing should not be too forced or go on for too long as this will cause the airways to tighten, making it more difficult to clear the secretions and it may be tiring or painful.
- If you have had an operation on your chest or abdomen you can support your wound with your hands or a pillow.
- If you do not clear any secretions then do not worry, return to step 1 breathing control and then repeat steps 1 and 2 before trying again.
- Depending on the amount of secretions you have to clear, the cycle may need to be repeated several times, but in general it should take about 10-20 minutes.
- If secretions are still not cleared then take a rest and try again later in the day.
- **After all sessions of chest clearance always end with a period of relaxed breathing control as in step 1.**

An example of the active cycle of breathing technique



If you require any further advice, your physiotherapist will be happy to help. Please contact:

Name: Tel:

Physiotherapist advice

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Alternative Formats

If you would like a copy of this information in large print, another language, audio tape or other format please call the Contact Centre on **03 44 811 8118**

Other sources of information

NHS 111

NHS Choices

www.nhs.uk/pages/homepage.aspx

NICE (National Institute for Health and Clinical Excellence)

www.nice.org.uk

Patient Advice and Liaison Service (PALS)

Freephone: **0800 032 0202**

Text: 01670 511098

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Northumbria Healthcare NHS Foundation Trust

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www.northumbria.nhs.uk

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