

Pulmonary Rehabilitation

Pulmonary rehabilitation is a course of exercise and education designed to help people with COPD get fitter, cope with their symptoms and understand their condition better.

Evidence shows that attending a Pulmonary Rehabilitation course can help people manage their condition, preventing flare ups, hospital admissions and can improve your quality of life.

If you are having difficulty with your breathing or become short of breath when performing your normal daily routines, please discuss with your doctor whether it would be suitable for you to attend a Pulmonary Rehabilitation course.

Created by Wyn Lloyd MCSP in line with the British Thoracic Society / Association of Chartered Physiotherapists in Respiratory Care (ACPRC) guidelines.

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Emily Krelle MCSP for continence advice.



Physiotherapy for COPD

Chronic Obstructive Pulmonary Disease (COPD)



This leaflet guides you through some of the physiotherapy techniques used to help people cope with Chronic Obstructive Pulmonary Disease (COPD).



This leaflet focuses on the five common concerns of people with COPD:

- Breathlessness
 - Positions to Relieve Breathlessness
 - Conserving Your Energy
 - Controlling Your Breathing
 - Walking Aids
- 2. Sputum/Phlegm Clearance
- 3. Continence
- 4. How to relax
 - Deep Muscle Relaxation
 - Visualisation
- 5. Staying Active

Breathlessness

Many people with COPD can feel breathless, even when doing simple daily tasks. This can be frightening and debilitating, however there is a checklist of simple things that you can do to help you deal with breathlessness and improve your quality of life.

Muscle relaxation

- Find a comfortable lying or sitting position. Think about how your feeling
- 2. Close your eyes and practice a few minutes of breathing control
- 3. Starting at the bottom and working up tense the muscles of your feet, lower legs, thighs, buttocks, tummy, back, shoulders, arms, hands, neck and face for 4-5 seconds before relaxing each.

 Only Tense one area at a time

- 4. Notice how much more relaxed your muscles feel. Stay in this position for a few minutes
- 5. When you're ready, open your eyes and take a few deep breaths. Let yourself become more aware of your surroundings and sit up slowly.

Visualisation

- 1. Find a quiet safe place
- 2. Sit or lie down and close your eyes
- 3. Imagine that you are in your favourite place
- 4. Imagine how it sounds, smells and feels
- 5. Feel the joy you normally feel when you are there.

Staying active

It is important for people with COPD to remain as active as possible. Staying active helps maintain lung health, clear lung secretions and phlegm, whilst improving fitness and health.

Being active also helps you feel less breathless when performing your normal daily activities and improves your sense of well-being. If you are thinking of increasing your exercise level you should check with your doctor first, as they can advise you on appropriate activities. Try to build up your exercise level slowly and don't make too dramatic a change in one go.



Relaxation strategies

Coughing fits and being short of breath can be very stressful, in turn stress and anxiety make you feel more short of breath. This can be a downward spiral. Because of this many people with COPD find it useful to practice relaxation techniques. There are many different relaxation techniques you can use, two of which are now explained.

Positions to relieve breathlessness

The diaphragm is one of the main breathing muscles. Putting yourself in certain positions makes the diaphragm work more efficiently, makes it easier to breathe and helps reduce breathlessness. The following are some positions that you might like to try when feeling short of breath. Use the positions that work best for you.

Lie on your side with your head up and your body rolled slightly forward. Put a pillow between your knees for comfort.



Sitting at a table, lean forward with your head and chest supported.

Sitting leaning forward, relax your arms on your thighs.



Sitting back, relax your arms.



Standing leaning forward against a support



Lean back against a wall, with your feet slightly away from it

Take a deep breath in and a short, sharp huff out as if steaming/polishing a glass. Cough if you need to.

Repeat until your chest feels clearer, or until you need to rest.

You should do your Active Cycle of Breathing Technique (ACBT) at least once a day, even when well so you can get used to doing it; However, it can be used as often as you need it to help you clear phlegm.

Continence

The coughing associated with COPD puts stress on the pelvic floor. Your pelvic floor muscles are the muscles that help you control your bladder and bowel. Over time this repeated stress can cause leakage of urine, wind or faeces. Pelvic floor exercises help you to keep your pelvic floor strong and enable you to perform "The Knack" (see below), therefore reducing incontinence issues.

How to contract your pelvic floor

Gently draw up your front and back passages as if you were trying to stop yourself passing wind or stopping your flow of urine midstream. It should feel like a squeeze and lift. Try not to hold your breath or tense your stomach, legs or buttocks at the same time.

The exercises

You should aim to do both slow and fast exercises three times a day; they only take approximately two minutes to do

Consider having more than one of the items you use most frequently. A downstairs and upstairs vacuum cleaner, telephone or glasses will help you avoid carrying extra loads up and down the stairs.

You can do pelvic floor exercises in lying, sitting, or even standing at a bus stop

Slow exercise

Contract your pelvic floor and hold it for as long as you can, up to ten seconds. Build up to doing 10 repetitions of this.

Fast exercise

Quickly contract and relax your pelvic floor, up to 10 times.

The Knack

This means contracting and holding your pelvic floor muscles prior to and during anything strenuous. You should try to do this prior to and during coughing and sneezing; this can help reduce leakage.

If you suffer with incontinence you may want to ask your doctor to refer you to a 'continence specialist'.

Airway Clearance

Many people with COPD have trouble clearing sputum or phlegm. There are simple things you can do to make this easier.

- 1. Stay as mobile as possible
- 2. Keep hydrated

3. Perform sputum clearance exercise such as The Active Cycle of Breathing Technique (ACBT).

The Active Cycle of Breathing

The active cycle of breathing is a group of exercises that are repeated in sequence to help clear phlegm and lung secretions. Follow the list below to perform the active cycle of breathing.

- 1. Relax for a few minutes (you could practice breathing control here)
- 2. Take as deep a breath as possible. Hold your breath for 2 seconds then relax out. Repeat 3-5 times. Stop and breathe normally if you begin to feel dizzy or short of breath
- 3. Relax until your breathing has returned to normal (again, you could practice breathing control here)
- 4. Take a medium breath in and a long, slow huff out as if you were steaming up a mirror.

Controlling your breathing

Breathing control

This is a way of calming your breathing when feeling short of breath and breathing rapidly. Try not to panic. To perform breathing control:

- 1. Get yourself in a position to relieve breathlessness
- 2. Try to gain control over your breathing by concentrating on your breaths, try to breathe in slowly (through your nose if possible)

- and out, either through your nose or through pursed lips (see pursed lip breathing)
- 3. Try to relax any areas of your body that aren't keeping you in position or helping you breathe
- 4. Gradually try to make your breathing slower
- 5. Focus on relaxing.

Breathing when walking (Paced Breathing)

People with COPD tend to have more difficulty breathing out than in. This can often make them breathless when walking. When walking on the flat, try breathing out for two steps and in for one step, or out for three and in for two, depending on the most suitable rate for you. When walking on slopes or upstairs remember not to hold your breath. Try to breathe rhythmically in time with your steps.

Pursed lip breathing



This helps you breathe out more easily and in turn helps make you feel less breathless. To do this breathe in steadily and then blow out through pursed lips. Try to blow out as long as comfortable, as if you were blowing out a large number of candles on a cake.

Blow as you go

This helps you to perform difficult tasks such as standing up, lifting heavy objects or reaching for objects. To do this, breathe in before you make the effort and then blow out as you make the effort, or "blow as you go". Don't forget to breathe in again before you repeat the task. You could combine this with pursed lip breathing.

Walking aids

Some people with COPD may find it easier to breathe when walking with a frame or stick. If you would like to be assessed for a walking aid you should discuss it with your physiotherapist. Your physiotherapist will be able to advise you whether you would benefit from, or be hindered by a walking aid.

Conserving your energy

Conserving your energy will help you to feel less tired and as a result make you less breathless. Follow the 4 Ps to help you conserve energy.

The 4 Ps

Prioritization

This involves reviewing your daily activities i.e. washing, shopping. You should:

- Check to see if it is realistic for you to do these tasks
- · Cut out anything that isn't necessary
- Ask for help if necessary.

Planning

This involves looking at when and how you do the tasks. You should:

- Use a timetable to plan when you do your tasks, spacing them throughout the day and allowing time to complete them without rushing
- Avoid unnecessarily repeating your movements, e.g. do all your upstairs tasks when upstairs so that you don't have to use the stairs repeatedly
- Do your difficult tasks at the time of day you feel at your best
- Consider investing in energy saving equipment such as a dish washer.

Pacing

This involves looking at the speed you do your tasks. Always:

- Do your activities at a comfortable pace
- Make sure to include rest and leisure time in your timetable
- Be flexible with your routine. If you have planned to do something strenuous and you feel particularly breathless, do the task another time.

Positioning

This involves looking at the position you are in when you perform task and the position of the objects needed to do tasks. You should:

- Try to maintain good sitting, standing, walking and lying postures.
- Consider sitting to perform tasks if you need to.
- Consider using long handled equipment (such as a mop instead of a rag to wipe up floor spills) so you don't have to bend or stretch for long periods
- Position the objects you need most between hip and shoulder height or in your most easily accessible cupboards, drawers or surfaces

