

Pulmonary Rehabilitation Information Leaflet

**Physiotherapy and
Occupational Therapy
Service**





Introduction

Pulmonary rehabilitation is a programme of exercise and education for people who suffer with breathlessness due to chronic lung disease.

The aim of the programme is to increase your fitness levels to allow you to complete your daily activities more easily and to educate you on ways to manage symptoms and become more confident in managing your health condition.

St Helens pulmonary rehab offers a few ways to complete your rehab:

Traditional face to face sessions: this consists of two classes a week for six weeks of approximately one to two hours each session. One hour will consist of individualised exercise and up to one hour of educational talks.

Home based sessions with weekly telephone support: you will be provided with an exercise programme to complete at home for six weeks and we will provide you with any equipment you may require for the time you are under our care. Your exercise programme may be in the form of a paper booklet or if you are confident with technology we may be able to offer a digital programme for you to follow. You will receive weekly telephone calls from the team to support you with progressing your exercises and getting the most out of your programme.

One to one supervised home based exercise sessions: For patients who are predominantly house bound we can offer one to one supervised exercise sessions at home where one of the team will visit once or twice weekly for a period of six weeks to complete your exercises with you and monitor progress.

Education only programme: If you are currently unable to exercise but would like to attend education sessions for support with managing symptoms then we will do our best to facilitate this so please discuss with your therapist if this is something you would be interested in.

As well as attending pulmonary rehabilitation, you are encouraged to also complete exercises at home. At the end of the six week programme, a reassessment will be arranged with the physiotherapist to monitor your progress. This booklet contains information of the topics covered in the educational talks.

What is COPD?

COPD describes a group of lung conditions that make it difficult to empty air out of the lungs because of damage to the airways.

COPD is Chronic Obstructive Pulmonary Disease

Chronic Long-term

Obstructive Means blocked or obstructed airways

Pulmonary Affecting lungs or airways

Disease Medical condition impairing bodily functions

COPD is an umbrella term and comprises the following conditions:

Emphysema

The alveoli (air sacs) in the lungs are gradually destroyed, creating large air sacs, which are less able to absorb oxygen. This makes the lungs less elastic and cause a feeling of breathlessness.

Chronic Bronchitis

Bronchitis means inflammation of the bronchi which can lead to an increase in the amount of mucus (phlegm) in the airways which in turn may give you a chronic cough.



How do our lungs work?

We breathe in air through our nose or mouth. The air then travels down the **trachea** (windpipe) where it splits into two smaller tubes, one into the left lung and the other into the right lung.

These tubes are called **bronchi**. These two tubes then divide into smaller tubes called **bronchioles** which then divide again to reach air sacs called **alveoli**.

It is in the alveoli that the oxygen is absorbed from the air, moved into the blood vessels and carried in the bloodstream around the body.

What causes COPD?

People can get COPD for different reasons, but most cases are related to smoking. Other causes include exposures to fumes and dust, air pollution and genetics.

The most important thing is to stop your lungs getting more damaged and to make the best of the lung capacity you have. Stopping smoking can help this as although it will not cure the condition it can help to prevent it from progressing further.



Symptoms of COPD:

- Shortness of breath
- Excess production of phlegm (mucus)
- Chronic cough or 'smoker's cough'
- Wheeze, noisy breathing due to air being breathed through narrow airways
- Chest tightness
- Frequent chest infections.

Everyone will have different symptoms and some symptoms may trouble some people more than others.

How is COPD diagnosed?

There are several ways that your COPD can be diagnosed including:

- Lung function tests, spirometry
- Medical history
- Smoking history
- Family history
- Chest x-ray/CT scan
- Arterial blood gas test.

Other lung conditions with similar symptoms:

Bronchiectasis the airways have become irreversibly damaged due to the alveoli being abnormally dilated which affects the clearance of mucus.

Pulmonary Fibrosis occurs when the alveoli become thickened due to scarring which makes the lungs work harder.

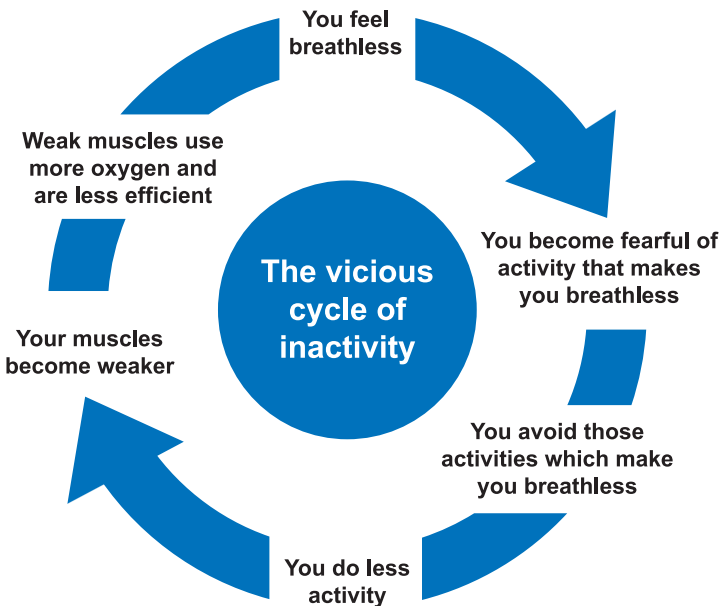
Benefits of exercise

Exercising helps to improve our exercise capacity and can enhance the performance of activities of daily living.

Exercising regular has many benefits including:

- Reduce anxiety and depression
- Reduce the feeling of breathlessness
- Improve bone, muscle, tendon, and ligament strength
- Improves cardiorespiratory fitness
- Improved sleeping patterns.

The vicious cycle that increases breathlessness in patients with COPD is shown below:



Avoidance of activity can lead to a loss of confidence, reduce physical fitness levels and increase social isolation.

Breathlessness is NOT harmful in a controlled form.

Exercise should be brisk enough to increase breathlessness. Participants should stop to rest. If breathlessness settles in three to four minutes, your exercise level is just right.

Managing breathlessness

Breathing control

Most people with COPD tend to breathe using the upper part of their chest, which is an inefficient way of breathing and requires a lot of effort and energy.

How can you change the way you breathe?

By using the lower part of your chest, that is, breathing from the diaphragm and relaxing your shoulders and upper chest, your breathing becomes more efficient.

First you should relax in a comfortable, well supported position

Try to relax your head, neck and shoulders

Place one hand on your upper chest and one hand on your stomach just below your ribs

Breathe in gently through your nose and then sigh the air gently out through your nose or mouth

If you are breathing correctly, you will find that your stomach rises as you breathe in and falls when you breathe out. Your upper chest should remain still.

Try to practise this for a couple of minutes several times throughout the day and regularly 'check' your breathing to ensure you are breathing as efficiently as possible.



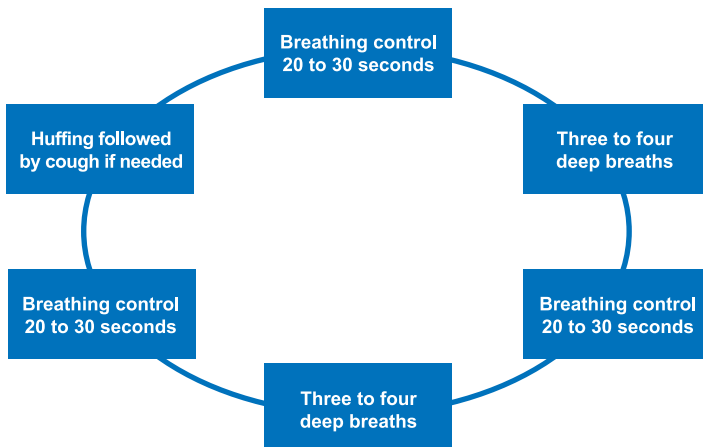
Methods to clear secretions

Breathing cycle: This is a cycle of different breathing techniques that can be used to help you clear secretions from your lungs and involves 3 techniques including: Breathing control (as described above), deep breathing and the forced expiration technique or huff.

Breathing control: Complete for 20 to 30 seconds.

Deep breathing: This technique expands your chest as far as possible allowing air to move behind any trapped mucus.

- Relax your shoulders and place both hands on your lower ribs
- Breathe in deeply through your nose and feel your ribs expand
- Breathe out gently through your mouth until your lungs feel empty
- Repeat three to four times.



The forced expiration techniques (huff): This technique encourages the sputum up through your airways till it can be cleared out when you cough (imagine you are steaming up a mirror).

Medium volume huff: This 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.

High volume huff: This 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.

We would suggest that you complete these breathing exercises daily to help to clear any phlegm in your chest and you can use it a few times a day if your chest is more productive.

What can an occupational therapist do for me?

Do you have difficulty with any of the following:

- Putting your shoes or socks on
- Reduced confidence with hobbies you used to take part in
- Getting in or out of the bath or bed
- Mobilising up the stairs

This is where occupational therapy can assist, by providing advice and recommendations to assist with activities in our daily routine.

An occupational therapist can assist you to be as independent as possible, as well as promoting your health and wellbeing. An occupational therapist will discuss and plan personal goals you would like to achieve.



An occupational therapist can:

- Prescribe aids and adaptations for the inside and outside of your home
- Advise on improving your sleep pattern and sleep hygiene
- Advise and educate on your medical condition (COPD) and minimising the effect symptoms have on everyday lives
- Maintain or develop new hobbies and interests
- Give advice on managing anxiety and depression
- Ensure people who are at the end of their lives are as comfortable as possible
- Help adjust everyday tasks
- Advise on benefits and completing forms
- Give you methods to improve transfers, mobility and posture
- Address concerns and provide advice on how to manage oxygen therapy with everyday life.

Nutrition

It is important that you eat a healthy, balanced diet to ensure that you are getting the nutrients that your body requires.

If you are eating well, you will feel more energetic, have healthy bowels and it will help to keep your body strong.

Individuals with COPD have a decreased appetite due to breathlessness which can lead to weight loss. It is therefore advised to eat little and often, buy ready meals, store long life nutritious foods for days when you don't feel well and have nourishing food and drinks.

Malnutrition is a common risk in patients with COPD which can affect the composition and function of the respiratory muscles and impairs muscle function.

The physiotherapist will be able to refer you to the dietician should you require further support.

Useful contacts

Pulmonary Rehabilitation Team: 01744 415560

COPD Nursing Team:
0151 430 1553

Asthma and Lung UK:
0151 228 4723
or email: helpline@asthmaandlung.org.uk

Carers Centre: 31-35
Baldwin Street, St Helens
01744 675615 or website:
info@sthelenscarers.org.uk

St Helens Talking Therapies: 01744 415650 or website:
www.merseycare.nhs.uk/our-services/st-helens/think-wellbeing

St Helens Wellbeing:
01744 371111 or email:
chcp.sthelens@nhs.net

Contact Cares at St Helens Social Services:
01744 676767

www.merseycare.nhs.uk



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Our patients matter

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Phone: 0151 471 2377 Freephone: 0800 328 2941

Email: palsandcomplaints@merseycare.nhs.uk

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