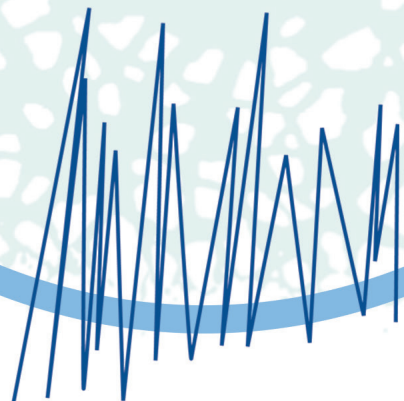


Pulmonary rehabilitation

A patient's guide



What is pulmonary rehabilitation?

Pulmonary Rehabilitation is an exercise and education programme run in a group setting for people with long-term lung conditions. It is also known as pulmonary rehab or PR.

Lung conditions commonly seen in PR include chronic obstructive pulmonary disease (COPD), bronchiectasis, emphysema, pulmonary fibrosis, pulmonary hypertension and lung transplants.

Royal Papworth Hospital also allows patients with other respiratory conditions, such as dysfunctional breathing, to attend.

The exercise programme is tailored to each individual and can be adapted to suit people with a range of abilities.

Breathlessness is a common symptom of lung disease and a natural response to exercise. The exercise programme is modified to fit your breathlessness but also to challenge it in a controlled way, along with your other symptoms. People who use oxygen can also attend the class.

The programme at Royal Papworth Hospital runs twice a week for six weeks. Each class lasts a couple of hours, split into time for exercise and time for learning from discussion sessions with various health care professionals.

Programmes may vary in other places, including running once a week for up to eight weeks. You may need to talk to your employer about meeting the time commitment.

How can exercise help?

Regular exercise can help you to feel fitter and stronger so that day-to-day activities are easier to perform.

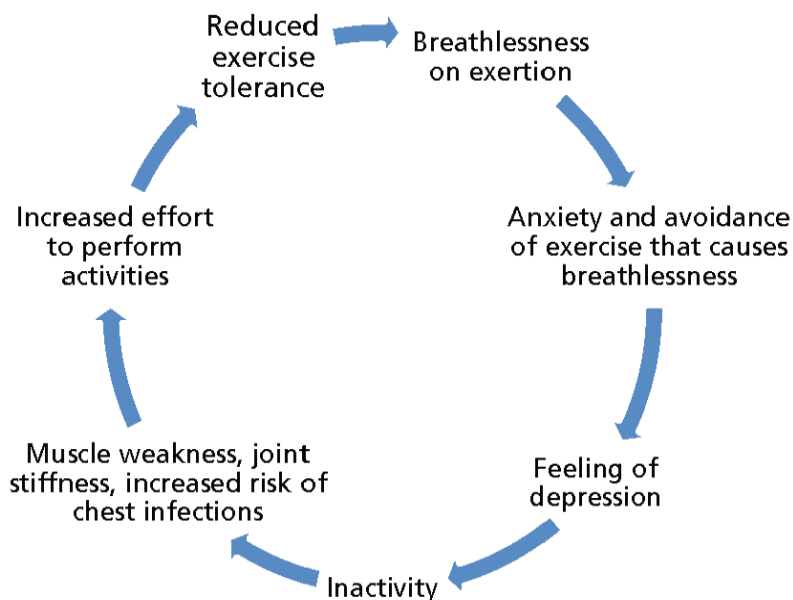
Evidence shows that exercise increases your strength and endurance so that your muscles use the oxygen you inhale more efficiently, reducing the workload of your lungs and heart.

Increasing your fitness can improve your breathlessness and help you to feel more confident and in control of your ability to complete tasks.

Other ways exercise may help include:

- Maintaining your flexibility
- Increasing your lung expansion and aiding secretion clearance
- Releasing endorphins to improve your mood and feeling of well-being
- Improving your sleep pattern
- Assisting with controlling your weight
- Preserving your bone density

A structured exercise programme can help to break a negative cycle caused by breathlessness, which is shown below:



What can I learn?

Whilst each condition is individual to you, you may learn from other people who attend the class, as well as learning more about your own capabilities.

You will learn how to exercise safely and at the right level for you. You should become more aware of how to look after your body and lungs, to manage your condition and symptoms.

The structure of your airways, how they work and how your condition can affect their function will be explained.

Advice on management of diet, energy conservation, chest infections, stress, medications, secretion clearance and breathlessness may also be covered in the teaching sessions.

Each PR service may cover different topics. The importance of exercise, how it will help you and how you can continue it when the programme has finished will be discussed.

You also may be told about other support groups available to you.

Where can I do it?

Royal Papworth Hospital offers a pulmonary rehabilitation programme. We offer either face to face classes in the gym or you can attend these virtually via Microsoft Teams on your laptop or phone.

Alternatively, courses are run in many different places across the country including Bedfordshire, Cambridgeshire, Essex, Hertfordshire, Norfolk, Northamptonshire, Suffolk and Warwickshire.

If it is not offered in your area, there are other options available such as exercise referral schemes, which can be discussed with your healthcare professional.

Courses are run in a range of settings including hospitals, gyms, community halls, health centres and leisure centres.

How do I get referred?

Your GP physiotherapist, respiratory nurse, doctor or a member of the respiratory team can refer you to pulmonary rehab.

Pulmonary rehab may not be suitable for people who have an unstable heart or neurological condition, uncontrolled epilepsy, uncontrolled diabetes or have suffered a recent cardiac event.

Criteria varies between areas and you may be accepted on a case-by-case basis.

If you are concerned, please discuss this with your healthcare professional.

Do I need to do any tests?

You will have to attend an initial assessment prior to starting the programme. You will be asked a range of questions to find out more about your condition and how you are managing. You may also be asked to complete a walk test to measure your current fitness and oxygen levels.

There is no pass or fail. The tests are done to allow a comparison to be made with your results after you finish the class to see how the programme has helped you.

Other measures may be used, such as timing how long it takes you to stand up and sit down.

You will also be asked about how you would rate your symptoms. Most commonly, the **Borg score** is used which is a 0-10 rating scale for your breathlessness. You can see what it looks like in the following diagram:

Borg score rating scale 0-10:

| | |
|-----|-------------------------------------|
| 0 | Nothing at all |
| 0.5 | Very, very slight (just noticeable) |
| 1 | Very slight |
| 2 | Slight (light) |
| 3 | Moderate |
| 4 | Somewhat severe |
| 5 | Severe (heavy) |
| 6 | |
| 7 | Very severe |
| 8 | |
| 9 | |
| 10 | Very, very severe (maximum) |

The MRC scale (Medical Research Council Dyspnoea scale) is an alternative which you can use to grade how your breathlessness affects your activity in everyday life, such as climbing a set of stairs or walking uphill.

The MRC scale is from 1-5:

| | Degree of breathlessness related |
|---|--|
| 1 | Not troubled by breathlessness except on strenuous exercise. |
| 2 | Short of breath when hurrying on a level or walking up a slight hill. |
| 3 | Walks slower than most people on the level, stops after a mile or so, or stops after 15 minutes walking at own pace. |
| 4 | Stops for breath after walking 100 yards or after a few minutes on level ground. |
| 5 | Too breathless to leave the house, or breathless when dressing/undressing. |

You may have completed spirometry previously, normally to measure your lung function in order to make a diagnosis. These results may be passed on with your pulmonary rehab referral.

When can I start?

Some services have a waiting list but they will contact you once they have processed your referral. The sooner you are referred, the sooner you may start the course. In the meantime, you should continue your own exercise as discussed with your healthcare professional.

Useful link for further information and other peoples' experiences:

blf.org.uk/support-for-you/keep-active/pulmonary-rehabilitation

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