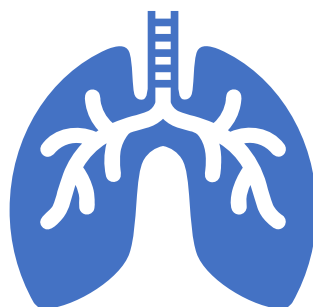




Your guide to...

# Understanding Breathlessness

Physical activity and exercise



## How to use this guide:

This guide forms part of a series. Each guide provides information, tips and strategies for coping with physical health symptoms that are impacting on daily life. Physical health symptoms can be personally challenging on both a practical and emotional level; with this in mind, these guides have been edited and co-developed by specialists from both physical and mental healthcare teams, with guidance from experts with lived experiences.

All information in these guides are intended to advise and benefit the individuals who intend to use them. The information described can be used as a supplement but does not replace any advice provided by your healthcare specialist(s). The authors do not accept responsibility for use of the information contained in the guides for any other purpose than has been described. If you are concerned about your physical health symptoms or condition(s) then you should seek qualified medical advice from your GP or your healthcare specialist(s).

## Contents

<b>Benefits of physical activity and exercise .....</b>	<b>2</b>
Physical benefits.....	2
Mental and psychological benefits.....	2
<b>What happens in the body during exercise or activity?.....</b>	<b>2</b>
1. Lungs and heart .....	3
2. Muscle .....	3
3. Post-viral fatigue and long-COVID .....	3
<b>Can physical activity and exercise help with breathlessness? .....</b>	<b>3</b>
<b>How often should we be physically active? .....</b>	<b>4</b>
<b>What physical activity or exercise should I do? .....</b>	<b>5</b>
<b>Other resources that you might find helpful.....</b>	<b>6</b>

## Benefits of physical activity and exercise

The benefits of physical activity and exercise are extensive both for your body and your mind.

The [British Lung Foundation](https://www.blf.org.uk/support-for-you/keep-active) has an excellent resource leaflet – [Keeping active with a lung condition](https://www.blf.org.uk/support-for-you/keep-active) - <https://www.blf.org.uk/support-for-you/keep-active>. They list the following benefits:

### Physical benefits

- improves the strength of your breathing muscles, heart and circulation. This helps you use oxygen more efficiently, so you don't get so breathless
- better muscle strength in every part of your body
- improves bone strength
- helps you resist infections
- helps you maintain a healthy weight
- improves flexibility and joint mobility
- higher energy levels
- better sleep
- lower stress levels and blood pressure
- lower risk of falling (by improving your balance)
- reduces your risk of developing other health problems such as heart disease, stroke, diabetes, osteoarthritis, dementia and some cancers

### Mental and psychological benefits

- raises your confidence and self-esteem
- helps your brain work better, so you can learn and remember more
- helps you cope better with the feeling of being out of breath
- reduces anxiety and depression
- creates new social opportunities, so you can get out of the house and meet people
- makes you feel happier

## What happens in the body during exercise or activity?

When you move any part of your body your muscles tighten (contract) in order to move your joints. Your muscles require more oxygen to make this contraction.

In order to pump the oxygen to your muscles, your heart and lungs must work harder. You will feel your breathing become quicker and deeper, and you may feel your heart beating more rapidly. These physical changes can lead to the feeling of breathless and it is a normal reaction for everyone to have during moderate physical activity or exercise.

There are many reasons why you might find it more difficult to be physically active or exercise. Some of these are listed below and your health professional can discuss your specific concerns with you.

### **1. Lungs and heart**

A lung or heart condition may affect the body's ability to work harder in order to meet the extra demand during physical activity.

### **2. Muscle**

When muscles are weak they become tired quicker than when they are strong. They are also less efficient so the heart and lungs have to work harder to provide the oxygen.

### **3. Post-viral fatigue and long-COVID**

An infection can linger in the body or lead to other changes whereby the body's initial reaction to an infection can lead to further changes. This type of fatigue is much more than simply feeling tired. It can result in intense loss of energy, breathlessness or fatigue when doing activities, feeling exhausted (even after sleep), concentration difficulties and other unpleasant experiences, all of which can interfere with daily activities.

## **Can physical activity and exercise help with breathlessness?**

You can improve how efficient your body is by being physically active or exercising to make muscles stronger. If your body uses oxygen more efficiently, then there is less demand on your heart and lungs when you are physically active.

As mentioned previously, becoming breathless when exerting yourself with a physical activity is a normal process for everyone, including for people with conditions that affect breathing. In some

cases, the cause for breathlessness or fatigue needs to be investigated in order to help you judge what level of physical activity is right for you and to help you feel safe while exploring ways to be physically active.

Regular physically activity at the right level for you, combined with learning about different levels of breathlessness, can help your body to become increasingly used to feeling some levels of breathlessness during activity. Your perception of your level of breathlessness can also change, so that when you feel breathless you may feel more in control. This is called de-sensitisation.

## How often should we be physically active?

All adults should aim to engage in a moderate activity (one that raises the heart rate or leads to faster breathing) for 30 minutes, 3 times per week.

The level of intensity of the activity is important to get the benefits described previously. In some cases, you may need guidance from healthcare professionals to work this out.

A breathlessness scale called the [BORG breathlessness scale](#) can be used to judge if you are being physically active at the right level.

Ask yourself: **How much difficulty is your breathing causing you right now?**

0	Nothing at all
0.5	Very, very slight (just noticeable)
1	Very slight
2	Slight
3	Moderate
4	Somewhat severe
5	Severe
6	
7	Very severe
8	
9	Very, very severe (almost maximal)
10	Maximal

- You should aim to work between 3-4 (moderate to somewhat severe breathlessness) on the scale in the 'Exercise Training Zone'
- If you are physically active and your breathlessness is only very, very slight (less than 1 on the scale), then you should work a little harder.
- You should never go higher than 4 on the scale. If your breathlessness is "Severe" or worse, you need to stop what you are doing and rest.
- Try to reduce your breathlessness by using the breathing control exercises in a 'supported lean forward' position of your choice (talk to your health care professional if you need more advice on how to reduce breathlessness).



*For more information, please read our guides on '**managing breathlessness**' (A1-3; C1) and '**managing fatigue**' (B1-2) where breathing control, positions of ease, pacing and fatigue are described in more detail.*

## What physical activity or exercise should I do?

It does not matter what type of physical activity or exercise you do, as long as you are increasing your breathlessness to level 3-4 as discuss above.

The most important thing is that you enjoy the activity you are doing, or it is an activity that matters to you, so that you aim to do it regularly.

You may be getting breathless just doing routine daily tasks where it matters to you to be able to do them regularly. You may like walking or doing a formal exercise programme. You may prefer combining exercise with daily tasks such as cleaning or gardening. You may enjoy dancing or swimming.

Whatever activity you are doing you can aim to do a little more each week, or month, so that you continue to strengthen your heart and muscles.

It can help to set goals and write down your activity so you can see the progress you are making.

The [British Lung Foundation](https://www.blf.org.uk/support-for-you/keep-active/exercise-video) has a selection of videos which may give you some ideas: [Stay Active Stay Well - https://www.blf.org.uk/support-for-you/keep-active/exercise-video](https://www.blf.org.uk/support-for-you/keep-active/exercise-video)

## Other resources that you might find helpful

There are several websites that describe techniques about how to cope with breathlessness if you have a health condition. You can access these using the links below:

Association of Chartered Physiotherapists in Respiratory Care website:

<https://www.acprc.org.uk/publications/patient-information-leaflets/>

British Lung Foundation: <https://www.blf.org.uk/support-for-you/breathlessness/how-to-manage-breathlessness>

British Heart Foundation: <https://www.bhf.org.uk/information-support/heart-matters-magazine/wellbeing/meditation-and-mindfulness>

Your COVID recovery NHS website: <https://www.yourcovidrecovery.nhs.uk/managing-the-effects/effects-on-your-body/breathlessness/>

Macmillan's managing breathlessness booklet for people with breathlessness as a result of cancer or cancer treatments: <https://www.macmillan.org.uk/cancer-information-and-support/stories-and-media/booklets/managing-breathlessness>

Diaphragmatic breathing exercise practice: <https://youtu.be/F0jvwQ9vURg>

Helpful breathing positions as outlined in  **Guide C1 'Your guide to relaxation and breathing techniques: supporting wellbeing and health management'**

## Top tips for controlling breathing:

- Stop and rest
- Get into a relaxed breathing position (see our guide on this). Relax the shoulders, unclench fists
- Use relaxed breathing and use it regularly (see our guide on this). Blow out using pursed lips
- Learn how to relax and practice this regularly as part of your daily routine
- Distract yourself so you are not focusing on your breathing. Count backwards from 200 to 1.
- Focus on an object - describe it to yourself.
- Imagine yourself somewhere you find relaxing. Think about the scenery and the colours, smells and sounds.
- Listen to music, TV or radio.
- Plan and pace yourself so you don't take on too much or get bored