

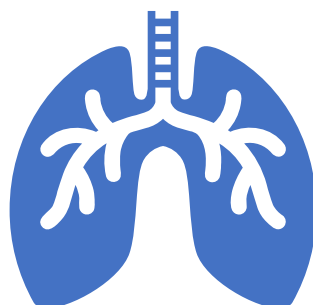


Your guide to...

Managing Breathlessness

What causes breathlessness?

 A1



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).

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What causes breathlessness?

Breathlessness or shortness of breath can be caused by many different things. Some of the common causes of breathlessness are described here.

Please talk to your health care professional about the causes of your breathlessness.

You may find this guide helpful as a starting point for understanding breathlessness – it can help to note down any questions or concerns you have so that you can ask a healthcare professional about them and get a better understanding of how breathlessness might affect you personally.

1. Airways and lungs

- Respiratory conditions and respiratory infections can cause changes to airways and lung tissues and this may affect how easy a person can find it to breathe
- Respiratory conditions include asthma, chronic obstructive pulmonary disease, bronchitis, emphysema, bronchiectasis, interstitial lung disease. Respiratory infections include influenza (the flu), pneumonia and COVID-19.
- It is possible to have a narrowing of the airways due to the muscles around the airways tightening and compressing the airways. Alternatively, the airways may be narrowed, due to swelling of the tissues, or blocked with sputum.
All of these things can cause more resistance to the air flowing into and out of the airways and therefore breathing may feel more difficult.
- It is possible to have damage or scarring to lung tissues due to an infection or a disease process. This makes it more difficult for oxygen to transfer from the lungs to the blood vessels. This can cause breathlessness.

The **British Lung Foundation** have many information booklets about respiratory conditions. You can find them on their website: <https://www.blf.org.uk/support-for-you>

2. Heart and circulation

There are a number of cardiovascular conditions that can result in breathlessness including coronary heart disease, abnormal heart rhythms (such as atrial fibrillation or tachycardia), heart failure and myocarditis (inflammation of the heart muscles, often following an

infection). Ask your healthcare professional about the process that leads to breathlessness for your physical health symptoms if you would like to better understand this. Below is some information about the process for heart failure.

Heart failure is a term used to describe any condition which causes the heart to not pump as effectively as it should. If the heart is not able to pump our blood around the body, it can cause a back-up of fluid (congestion). This fluid can accumulate in the lungs. It takes the place of the air that should be in the lungs and this is why some people can feel breathless.

Another sign of heart failure is swelling in the ankles due to fluid collecting there.

More information can be found on the [British Heart Foundation](https://www.bhf.org.uk/information-support/publications/heart-conditions/your-guide-to-heart-failure) website. This is the link to their information booklet about heart failure:

<https://www.bhf.org.uk/information-support/publications/heart-conditions/your-guide-to-heart-failure>

3. Muscles and bones

During periods of being unwell the muscles in the body become weaker. Weaker muscles are not as efficient and use more energy and oxygen. This can make a person feel tired and breathless when using their muscles (physical activity). This is known as deconditioning.

Body muscles need extra oxygen to move the body during physical activity. This means that the heart and lungs must work harder to deliver the oxygen to the muscles.

Breathing becomes faster and deeper and the heart may beat faster. This is a normal response to exercise and happens to everyone. Even very fit people will see this response when they exercise.



*For more information please read: **Guide A4 'Your guide to understanding breathlessness: physical activity and exercise'***

4. Anxiety and panic

Anxiety and panic can lead to changes in breathing patterns. These emotional reactions can make the breath fast and shallow rather than full and deep; this is sometimes called over-

breathing or hyper-ventilation. This process can make a person feel breathless because of the build-up of carbon-dioxide that results. The ‘understanding breathlessness’ guides explore this in more detail and offer some strategies that can be used to overcome these feelings.



*For more information about anxiety and breathlessness, please read: **Guide A3**
‘Your guide to managing breathlessness: anxiety and panic’*

5. Pain

In order to breathe, the chest wall is constantly moving in and out. Any pain around the chest, back or abdomen can make breathing feel uncomfortable as the ribcage moves.

Pain can also affect sleep. Breathing can also feel more difficult when tiredness occurs.

6. Obesity

Being overweight increases the risk of getting conditions such as heart disease. As described above, heart failure can in turn cause breathlessness.

For anyone who is carrying additional weight around the middle, this weight pushes up against the diaphragm (the main breathing muscle). The diaphragm needs to be able to flatten in order to allow the lungs to expand and extra weight around the tummy limits this movement and can lead to breathlessness.

The **British Heart Foundation** website has some helpful booklets around weight and health eating:

<https://www.bhf.org.uk/information-support/risk-factors/your-weight-and-heart-disease>

<https://www.bhf.org.uk/information-support/publications/healthy-eating-and-drinking/eat-better>

7. Breathing patterns

Any of the conditions described above can affect the way a person breathes. A normal response to a stressful situation is for our body to “over-breathe”. This may be breathing

faster, deeper or in a different pattern to usual patterns. Once the stressful situation has passed, breathing should return to its normal rate and pattern.

Sometimes, however the pattern does not return to normal even once the stress is resolved and this in turn can lead to breathlessness.

A specialist respiratory physiotherapist can assess breathing patterns.

More information can be found on this website: <https://www.physiotherapyforbpd.org.uk>

Breathlessness and oxygen

A proportion of people may have been treated with oxygen in hospital. Sometimes a medical condition causes the oxygen levels in the blood to reduce and this requires treatment with oxygen in hospital.

It is important to be aware that breathlessness is not always due to a drop in oxygen levels. In fact, all conditions described above can cause breathlessness while your oxygen levels remain stable.

If your oxygen levels are normal there is no benefit from receiving additional oxygen and therefore oxygen is not a first line treatment for most causes of breathlessness.

Other breathing methods 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