



Royal Berkshire
NHS Foundation Trust

Breathing Pattern Disorder

Information for patients

There are many reasons why our breathing can lose its natural rhythm (see diagram). Triggers cause disturbance to our breathing which could lead to unpleasant symptoms, including breathlessness, which may be out of proportion to what you are doing.



Image from Physiotherapy for breathing pattern disorder

Having a breathing pattern disorder means we could be using the wrong muscles to breathe, using the upper chest instead of the diaphragm and mouth breathing rather than nose breathing.

Breathing could be too fast or the breaths too large.

Breathing too much (hyperventilating) occurs when we breathe more than is necessary to meet the body's natural requirements. This can lead to a chemical imbalance in the blood due to a lowering of the carbon dioxide level.

Over breathing is a normal reaction to any stressful situation, but once it passes, breathing returns to a normal rate of 8-12 breaths per minute. However, sometimes due to the result of prolonged stress or a physical trigger, a continual pattern of over breathing can occur and the breathing pattern does not return to a normal level.

The most common signs and symptoms of over breathing are:

- Feeling you can't fill your lungs up enough.
- 'Pins and needles' in hands/mouth.
- Breathlessness on minimal exercise.
- Feeling permanently exhausted.
- Frequent sighing and yawning.
- Throat symptoms.
- Palpitations.
- Light headedness.

Aims

Short term aim: to control the symptoms.

Long term aim: to maintain a correct pattern of breathing.

Re-education of the breathing pattern

1. Lie on your back, with a pillow under your head and knees. Alternatively, use a sitting position where your back is fully supported.
2. Breathe in through your nose as it warms, filters and humidifies the air. Breathe out gently through either the nose or mouth.
3. Gently breathe **in**, keeping the upper chest and shoulders relaxed. Try and feel a slight swelling or expansion of the lower ribs and upper abdomen as the air comes in. Imagine you are filling a kettle up; you fill from the bottom not from the top. The kettle only needs to be a third full.
4. Place one hand on your stomach – it helps to improve sensory awareness. Closing your eyes also helps you focus on your breathing pattern without external distraction. Alternatively, place a small book or box on your stomach and watch it rise and fall with your breathing pattern.
5. If you have too much upper chest movement, place both hands

behind your head.

6. Concentrate on the '**in breath**' and notice when and how it starts and finishes.
 7. Breathing **out** should be slow and passive and is longer than the breath in. Do not force the air out from the stomach, keep it relaxed.
 8. Your shoulders and upper chest should be relaxed throughout.
 9. At the end of the breath out; relax and pause before the next breath restarts. You should feel relaxed during this rest point phase and should not feel any tension.
- If you feel you need to take a deep breath, try swallowing. If this doesn't work, try sighing or taking a slow controlled deep breath. This then must be followed by holding the breath after expiration (known as a **breath hold**) for a count of 5 or 6 – this acts as a compensation mechanism.
 - Use timing and counting as a way to reinforce the new pattern of breathing. Progress from ***in out, in out, in....*** to a slower more natural pattern of ***in and out, two, three, four, in and out, two three....***

At first, it will be very difficult to achieve this pattern of breathing without full concentration, but gradually you will begin to find it easier to master. Once you can learn to control the breathing pattern whilst lying and sitting, you should progress to standing, walking and finally exercising. During this time you may need to breathe in and out through an open mouth.

- **Intermittent breath holds** should be practiced throughout the day. This should not be just after a deep breath but anywhere during the breathing cycle. Just stop and **breath hold** for the count of one or two, providing it does not provoke a larger inspiration afterwards. It

is helpful to link breath holds to every day activities so they become a conditioned reflex (habit).

- You need to practice as often as you can. Try little and often, e.g. three minutes every hour. As your body adapts to this new way of breathing, you will find it requires less time and energy and is more relaxing.

Remember: The more time you put into practicing, the sooner you will feel more in control.

Useful tips:

Be aware of the way you breathe:

- Learn to nose breathe.
- Try to stop yawning and sighing.
- Focus your breathing gently into your abdomen, avoiding excessive upper chest movement.
- Become aware of your posture and learn to recognise areas of tension in your body.
- Exercise – is a good way of increasing your general feeling of well-being and self-confidence.

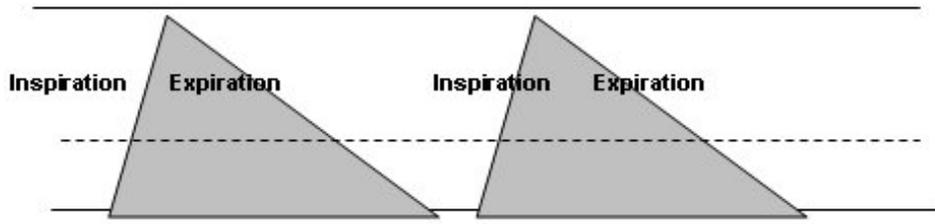
3 important factors for good breathing – posture, nose breathing and relaxation!

And remember, Rome was not built in a day!!

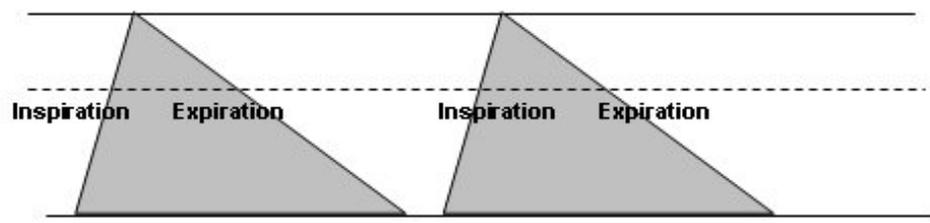
Normal breathing
10-14 breaths per minute



Too big inspiration

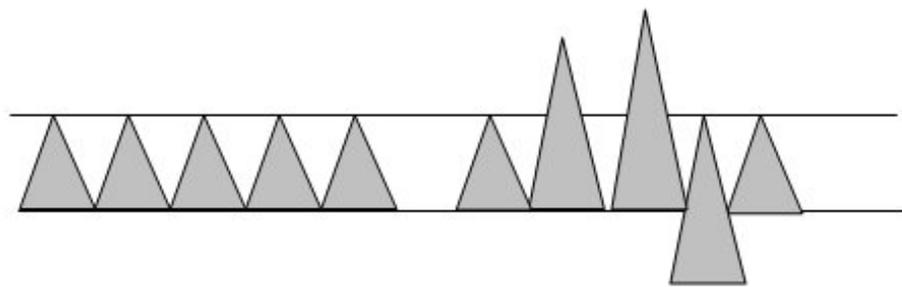


Too big expiration



Too fast

Irregular



Further information

www.physiotherapyforbpd.org.uk

Notes:

This document can be made available in other languages and formats upon request.

Respiratory Medicine/Physiotherapy Department, Oct 2006

Reviewed: August 2018

Review due: August 2020