

Breathing Pattern Disorder following COVID-19

What is a Breathing Pattern Disorder?

A breathing pattern disorder is an abnormal breathing pattern that causes symptoms long after the initial cause has resolved. Your breathing pattern is likely to change during an illness, such as COVID 19, because it affects the lungs. After your lungs have healed your breathing pattern should return to normal. For some people, their breathing does not revert back to normal even once their body has recovered. They can suffer with symptoms of ongoing breathlessness, chest tightness and feelings of not being able to get enough air in. Breathing pattern disorder and its symptoms can be treated with breathing pattern retraining.

Possible Signs and Symptoms

Frequent sighing and yawning	Feeling breathless, at rest or after minor exercise
Feeling exhausted and unable to concentrate	Difficulty co-ordinating breathing and talking/eating
Disturbed sleep	Erratic heartbeats/Palpitations
Breathless when feeling anxious or upset	Pins and needles in hands/arms around mouth
Feeling lightheaded	Chest pain

What is a normal breathing pattern?

At rest:

- Breathing should be in and out through your nose. The nose is your body's natural filter; it traps impurities, warms the air and adds moisture so that the air you breathe is just the right conditions for your airways when it reaches them.
- You should be able to 'tummy breathe', meaning your diaphragm (the big muscle that sits under your lungs) is doing the work and that your tummy should rise and fall gently with each breath. Your shoulders and neck muscles should be relaxed and your upper chest still.
- Your breathing rate should be between 10 and 12 breaths a minute.
- Breathing should be silent and your breaths should be small and the same size.

Management of Breathing Pattern Disorders

A Physiotherapist will assess your breathing pattern and recommend how to retrain your breathing pattern and how to manage your symptoms. Breathing pattern retraining will start with an exercise called **Breathing Control**. You should complete this in the position recommended by your Physiotherapist. This may be sitting in a supported chair or lying on your back with your knees bent up and feet flat on the floor.

1. Place one hand on your chest and one hand on your tummy just below your rib cage or bra line.
2. Make sure you are breathing in and out through your nose.
3. With each breath in feel your tummy lift and with each breath out feel it relax back down. Make sure your upper chest is still when you are breathing.
4. If you can feel both your tummy and upper chest rising and falling with each breath, try making your breaths smaller.
5. After each breath out ensure there is a slight and natural pause before the next breath in.
6. Your breathing should be silent- if you can hear your breathing, slow down your breaths in and out to obtain a silent breath.



This may feel very difficult and strange when you first start, and you may find yourself want to take a deep breath in. This is known as air hunger. This happens because your brain is finding this correct way of breathing uncomfortable and abnormal. It is important to try to gently resist this urge and with time it will ease.

You should practice regularly, aiming for 5 minutes 4 times per day. You may find that you cannot achieve 5 minutes to begin with. This will improve with practice and over time. As your body adapts, you will find it takes less time and energy to breathe in this way.

Other management strategies include ensuring you are nose breathing when at rest and when you are walking on level ground.

When this feels more natural, your Physiotherapist will progress your breathing control, looking at implementing this into daily tasks and exercise.