

# Breath Work

Category: 3. Road to Recovery

What is breath work?



Breath work is about doing breathing exercises or techniques where you change your breathing pattern. It can involve breathing slower, drawing the air down into the lower parts of the lungs, and holding your breath.



## How breathing is impacted by Long COVID



Many people with Long COVID have been found to have a disrupted breathing pattern where they breathe primarily into just the upper chest and breathe too quickly.

When you breathe, oxygen goes into your lungs and crosses into your bloodstream to be delivered to tissues around your body. At the same time, carbon dioxide goes the other way, out of your bloodstream into the lungs to be exhaled out of your body.

When you take shallow and rapid breaths, you end up 'blowing off' too much carbon dioxide. The imbalance between carbon dioxide and oxygen in your bloodstream can make Long COVID symptoms worse.

### Why is breath work important?

Breathing only into your upper lungs can make you overuse your upper chest and neck muscles, which can lead to muscle fatigue, tightness, pain, and headaches.

Breathing more slowly, while using your diaphragm (belly), can stimulate your parasympathetic (rest and digest) nervous system, which can lower your heart rate and help with digestion and muscle relaxation. Retraining your breathing pattern can also help reduce many other Long COVID symptoms.

## How to retrain your breathing

Basic breath control is a simple exercise to help you to retrain your breathing pattern. It's best to begin in a comfortable resting position, such as sitting or lying down with your back supported.

1. Place one hand on your upper chest and the other hand on your belly.
2. Try to breathe in and out through your nose with your mouth closed.
3. Keep your breathing calm and even. Do not try to force deep breaths.
4. Turn your focus to the hand on your belly. As you breathe in, try to make your hand move up and then lower as you breathe out. With your hand on your chest, try to keep it as still as possible (no big ups and downs).
5. *Gradually* try to slow down your breathing rate. If you start to feel breathless (out of breath or winded) or lightheaded, you may be trying to slow down too much, too quickly. Take your time.
6. Continue for 3 to 4 minutes at a time, as you can manage, and repeat 3 to 4 times a day.

An easy way to remember this technique is: 'Nose, low, and slow.'

## Bring awareness to your breathing

Once you are comfortable practicing breath control in a supported resting position, you can start to try it when you are sitting or standing upright. Eventually, you can do it with your daily activities.

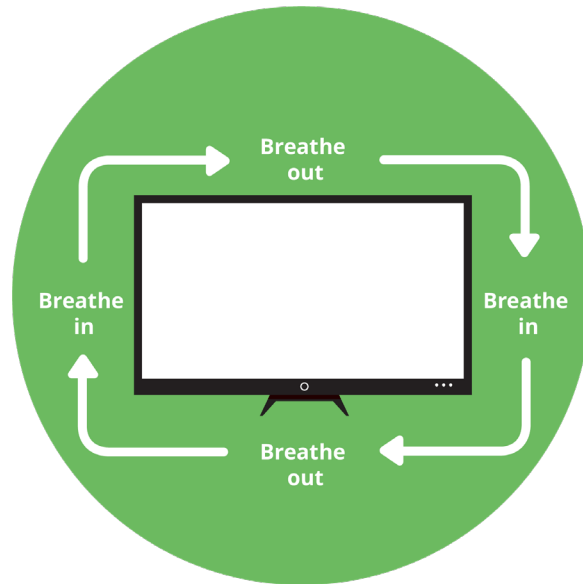
Practicing mindfulness with your breathing pattern can help with this process. This means bringing awareness throughout your daily activities to how you are breathing. Simply notice without judgement when you have gone back to breathing quickly and into your upper chest. Then, take a moment to 'reset', wherever you are, and practice 'nose, low, and slow.'

Breath control is also useful for when you are ready to increase activity because it can help you keep your heart rate lower and conserve energy. You can discuss this more with your physical therapist.

## Other helpful exercises

- Expiratory holds (holding your breath after you exhale) are used because over-breathing can lead to increased carbon dioxide sensitivity. This exercise can help your body get used to a little more carbon dioxide building up in your bloodstream, reducing feelings of air hunger. This can help slow down your breathing.
- Inspiratory holds (holding your breath after you inhale) can help strengthen the diaphragm and improve air capacity. This can help you breathe more deeply.

- Rectangle breathing (taking longer exhales than inhales, having a visual distraction) can stimulate the parasympathetic (rest and digest) nervous system, calm you down, and decrease your heart rate and breathing rate.



- Alternate nostril breathing (a yoga technique) can be calming and help bring balance to the autonomic (fight or flight) nervous system.
- Box breathing (combining slower breathing with inspiratory and expiratory holds) can improve lung function and reduce stress and anxiety.

## Important Tip

Breath holds can be difficult at first, especially after you exhale. It's important to start with brief holds (for example, 1 to 2 seconds) and build up as you can tolerate.

If you feel lightheaded or breathless from practicing, you are probably trying too much, too soon. Try a shorter hold and/or fewer cycles of breathing this way until you find a level you can tolerate well.