SAFE EXERCISE WITH LONG COVID



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KEY POINTS

- Long Covid affects exercise in a number of ways. It changes the way your body produces energy, and can cause post-exertional malaise (symptoms getting worse after activity).
- You can make exercise safer for yourself by pacing your activity, exercising in small but frequent periods, making sure you are well-hydrated, taking care of your breathing, and building in plenty of breaks and recovery time.
- A useful tool for pacing is the RPE Scale, which is a way to rank exercise on a scale of 1-10 based on how it affects you. You should try to keep below 5 on the RPE scale.
- You can consult with health professionals and the CHSS exercise group for help.

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This factsheet deals only with the effects of Long Covid. For more general exercise advice, see our Essential Guide on "Physical Activity".

How does Long Covid affect exercise?

Long Covid, like other post-viral fatigue conditions, may make it difficult to exercise. Heavy exercise may even make your symptoms worse. We used to think the problem was deconditioning, where muscles lose strength with lack of use. Now we know that people with fatigue conditions have a lower threshold for anaerobic exercise.

What is anaerobic exercise?

If your muscles need more oxygen than they are getting, then they can use a different chemical reaction to fuel themselves. This chemical reaction is less efficient. It also produces a byproduct called lactic acid, which builds up in the muscles and causes stiffness and pain. This is normal - it is why even healthy people can be stiff or sore if they over-exercise. In people with Long Covid, it happens much sooner.

This may mean that you are unable to exercise as heavily as you expect, or that certain exercises are not healthy for you. You will need to be especially careful when doing heavy exercise.

Exercise with Long Covid can also be affected by post-exertional malaise (PEM).

What is post-exertional malaise?

Post-exertional malaise (PEM, also called post-exertional exacerbation) means that your symptoms get drastically worse after activity. This can last for hours, days, or weeks, and can affect all aspects of your health, including:

- Your mood, thinking, memory, or planning.
- Physical pain, stiffness, or aching.
- Tiredness.
- Balance or dizziness.

"Activity" does not just mean physical exercise. Symptoms can also be affected by mental or emotional work. Still, post-exertional malaise is likely to affect how you can exercise.

Post-exertional malaise can contribute to a "boom and bust" cycle. This is where you have short periods of feeling good followed by long periods of severe illness after overworking yourself.

Long Covid and post-exertional malaise are both medical issues, and you cannot push through them - trying to ignore your symptoms will only make them worse!

Should I stop exercising?

Absolutely not! Exercise has major benefits for people with Long Covid. If you can keep moving whilst taking care of your health, it can:

- Reduce fatigue.
- Improve blood flow, which helps with symptoms such as PoTS and brain fog.
- Improve your mood.
- Prevent muscle deconditioning, which will make you weaker and more tired.
- Improve your balance.

However, it is important to exercise safely, and to respect your limits and your own health.

Further reading

An important part of exercising safely with Long Covid is that it should fit into a more general management of your symptoms, especially fatigue.

To find out more about managing fatigue, see our booklet "Tiredness and Fatigue", our factsheet on "Long Covid Fatigue", and our worksheets for managing your activities.

These are available at our Resources Hub: <u>www.chss.org.uk/resources-hub</u>

The rules of safe exercise

When exercising with Long Covid, there are many steps you can take to make yourself safer and more comfortable. These range from finding the right kind of exercise for you, to joining an exercise group with specialists who know how to manage your condition, to regularly "checking in" on how you feel.

However, the most important things to bear in mind are:

- 1. Pace yourself.
- 2. Exercise should be little and often no hardcore workouts!
- 3. Stay hydrated.
- 4. Be aware of your breathing.
- 5. When you start to feel tired or in pain, take a break.

1. Pace yourself

Pacing is your best tool for safe exercise with Long Covid. You can find out more about pacing in our **Tiredness and Fatigue** booklet, but in essence, it means managing your level of activity and taking frequent breaks. This gives your body time to recover, and avoids the "boom and bust" cycle of unmanaged fatigue. In terms of exercise, this means:

- Taking frequent breaks.
- Breaking up your exercise into small chunks throughout the day and week, rather than trying to exercise for hours on end.
- Keeping the level of exercise manageable for Long Covid, this usually means you should stay below a 5 on the RPE scale (see the following page).
- Varying the sort of activity you do, and stopping **before** you feel tired.

The correct level of activity looks different for everyone, and will be affected by the other things going on in your life, such as mood, stress, and other responsibilities.

It can take a few tries to get the hang of pacing with Long Covid, and you will probably never be perfect at it! But being conscious of your energy and pacing your activity accordingly can make a huge difference to your health.

Pacing can be easier with help. If possible, work with a health specialist - usually an occupational therapist or physiotherapist - to develop an exercise plan that works around your condition.

It is also important to recognise the warning signs that you might be overdoing things. Keep notes of your condition if you can. This will help you to recognise patterns in your symptoms, and can help you to head off symptom flare-ups before they start.

Balancing exercise types

Because of your Long Covid, you may not be able to do as much exercise as you would like. This means that you have to think carefully about what is most important to include, and prioritise what you do.

Our experts recommend prioritising so-called "functional" exercise - that is, exercises which help to develop strength and stamina for day-to-day tasks. This could include walking, stretching, or sit-to-stand exercises. It can be helpful to speak to an occupational therapist about which exercises may be helpful.

It is important to build time into your routine for gentle, relaxing, and stretching exercises. Pilates, yoga, and tai chi are all highly recommended if you can do them.

You should have a small amount of cardio exercise (exercise which makes your heart beat faster) in your routine. However, remember to be careful and keep it below RPE 5.

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The Rate of Perceived Exertion (RPE) scale

Use this scale to judge what level of exercise you are doing. The level of a given activity will not always be the same - this is a measure of how it affects you, not of the exercise itself!

Specialists recommend that people with Long Covid **stay below a 5 on this scale**. This should be done unless they are being closely supervised by someone with knowledge of Long Covid and of their specific case.

1	Very light activity Hardly any exertion, but more than sleeping, watching TV, etc.	
2	Light activity Feels like you can maintain the pace for hours. Easy to breathe and carry on a conversation.	
3		
4		
5	Moderate activity Breathing heavily, can hold a short conversation. Still somewhat comfortable, but becoming noticeably more challenging.	
6		
7	Vigorous activity	
8	Borderline uncomfortable. Short of breath, can speak a sentence.	
9	Very hard activity Very difficult to maintain. Can barely breathe and speak only a few words.	
10	Maximum effort activity Feels almost impossible to keep going. Completely out of breath, unable to talk. You cannot maintain this for more than a short time.	

2. Exercise little and often

It is important to build small, low-impact exercise thoroughout your day. This might mean:

- Going for short walks (even just around the house).
- Getting up and doing some stretches.
- Spreading out any tasks that need you to be moving.

This will stop you from being too sedentary, as well as helping to break up your day and make it easier to keep a routine.

3. Stay hydrated

It is easy to forget to drink water while exercising. Keep a water bottle next to you if you can, and take frequent sips, even if you are not aware of being thirsty.

Regular drinks of water help to keep your blood pressure at a healthy level, which can help if you are experiencing PoTS or other similar symptoms. On the other hand, not drinking enough water while exercising can lead to headaches, fatigue, and dizziness. It also makes your exercise less effective.

Do **not** rely on energy drinks, as these can contain caffeine which makes fatigue worse in the long run. Avoid sugary drinks for the same reason. Both caffeine and sugar give you a short boost of energy, but then lead to an energy slump which can make post-exertional malaise much more likely. Caffeine is also a diuretic, which means that it can actually contribute to dehydration.

4. Be aware of your breathing

It is important to be conscious of your breathing while exercising. Long Covid often affects your breathing and lung capacity, which can make this even more important. Also, uneven or inefficient breathing means that you will be unable to get enough oxygen to your muscles. This causes anaerobic respiration, leading to aches, pains, and fatigue.

Breathe from your diaphragm where possible. The diaphragm is the muscle at the bottom of your ribs. For more information on managing diaphragmatic breathing, and other ways to control your breathing, see our booklet on **Breathlessness**.

Remember, if breathing is difficult or painful, or if it feels as though you are not getting enough oxygen to your body, it is okay to stop!

5. Take breaks

Rest and relaxation are just as important as exercise! Relaxing between exercises can help to recondition your body and prevent post-exertional malaise.

You should always aim to rest **before** you get tired. Finding the right time to rest will be easier with experience, but to begin with, a good rule of thumb is that you should not exercise continuously for more than 10-15 minutes without at least 5 minutes' rest.

The most important thing when exercising with Long Covid is **not to push yourself** to the limit. It may feel like you need to "power through" and try to exercise the way you did before you had Long Covid. However, this is counter-productive and will only make you less capable in the future. Be gentle with yourself, and recognise that the strongest thing you can do is to know your limits.

When resting - whether it is from physical exercise or something else - it is important not to pick up a new task. Even small things like knitting or reading a novel use up mental energy, and this can reduce the benefits of a good rest.

Resources

LongCovid.scot

Web: www.longcovid.scot/support

A central hub of organisations and charities which can provide help and information on Long Covid.

National Wellbeing Hub

Web: wellbeinghub.scot/resource/tips-for-managing-long-covid/

A central hub for self-management of Long Covid symptoms.

All of Chest Heart and Stroke Scotland's booklets and factsheets can be found online or ordered in print at www.chss.org.uk/resources-hub

This includes the following relevant documents:

Physical Activity Essential Guide Long Covid Essential Guide Life with Long Covid Essential Guide

You can also get personal support, information, and advice by calling our Advice Line on **0808 801 0899** or texting **ADVICE** to **66777**.

CHSS can also offer exercise groups for people who have long-term conditions like Long Covid. Call the Advice Line or go to our website for more: www.chss.org.uk/services/physical-activity/

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You can also go to our website for information, advice and support: www.chss.org.uk

Find a range of easy-to-read booklets and factsheets at our resources hub:

www.chss.org.uk/resources-hub



Scan here to see all our resources!

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