

COVID-19

Rehabilitation Guide



Name:

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What is Covid-19?

Covid-19 is an infectious virus that mainly affects the lungs. Breathlessness at rest and during physical activity can be a normal symptom of Covid-19.

Why is rehabilitation important?

Rehabilitation will improve your exercise tolerance, muscle strength, and help manage your breathlessness. **Only complete the exercises that have been discussed with you and ticked in this guide by a therapist.**

Why do I feel breathless?

Breathlessness is a very common symptom in some people with Covid-19. The lungs can become inflamed and the effort of breathing can increase. You may be breathing quicker and shallower, however it is important to try and stay calm. Anxiety can increase your heart rate and make your breathing rate increase further.

I'm worried about becoming breathless when I exercise

Covid-19 may result in you feeling more breathless during physical activities that never used to make you breathless. The fear of becoming breathless during physical activity may make you want to avoid doing these activities; however breathlessness is a normal and safe response to exercise. This guide will teach you how to manage your breathlessness.

**IF YOU FEEL MORE UNWELL DURING THESE EXERCISES THEN STOP
AND SEEK ADVICE FROM A HEALTH CARE PROFESSIONAL**

Breathing control – something to help you relax

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1. Get in a comfortable position
2. Close your eyes and bring your attention to your breath
3. Breathe in and out through your nose (or mouth if you are unable to do this)
4. Notice areas of tension in the body and try to release this with each breath out
5. Gradually try to make your breaths slower and deeper

Pursed lip breathing – useful during activities that make you breathless

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1. Breathe in gently through your nose
2. Breathe out with your lips pursed as if you are whistling
3. Try to blow out as long as comfortable (do not force your lungs to empty)

Blow as you go – useful during activities that make you breathless e.g. lifting an object (can be used with pursed lip breathing)

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1. Breathe in before you make the effort
2. Breathe out whilst making the effort (e.g. as you lift the object)
3. Always breathe out on the hardest part of the action

Positions of ease – these positions may help reduce your breathlessness and effort of breathing

High side lying:



- Lie on your side
- Use multiple pillows under your head and shoulders
- Bend your knees a little



Supported forward sitting:



- Sitting upright, lean forward on to a table
- Add as many pillows as required



Forward sitting:



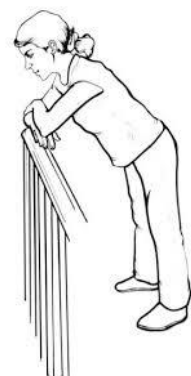
- Sit leaning forward
- Rest your forearms on your knees
- Relax your chest and shoulders



Supported standing:



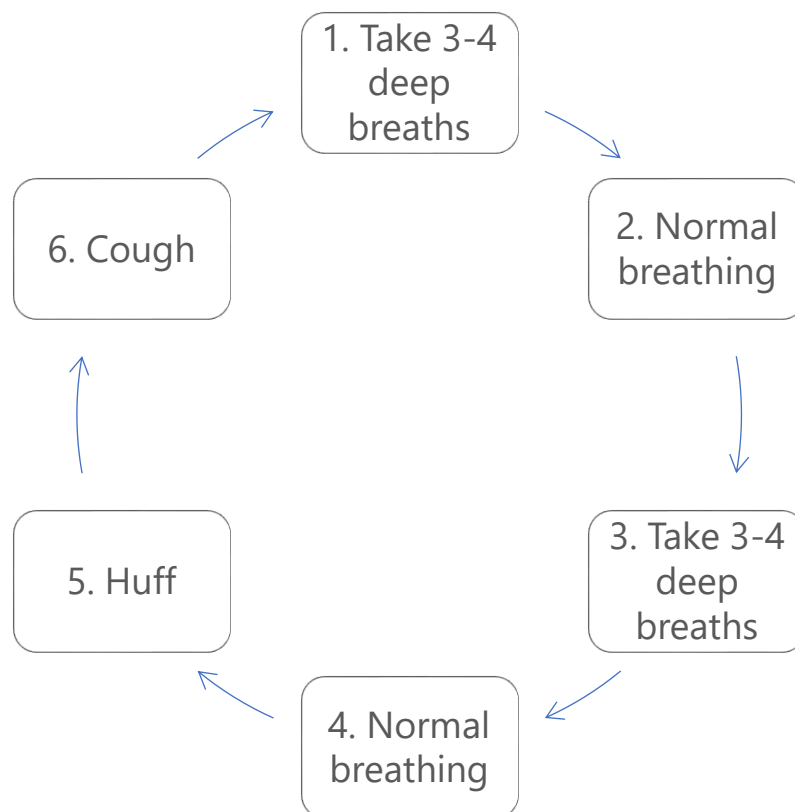
- Stand leaning forward and use a chair, bench or wall for support
- Relax your chest and shoulders



Why am I coughing up sputum?

Coughing up sputum can be a normal symptom of Covid-19. It is important to clear this from your airways to improve your breathlessness and oxygen levels.

Active Cycle Breathing Technique:



- Relax your shoulders
- Deep breathing – hold your breath for 2-3 seconds
- Huff – Exhale through an open mouth like you are trying to steam up a mirror
- Repeat the cycle 2-3 times

Exercise

Aerobic training – uses the larger muscle groups and is repetitive and rhythmic in nature such as walking, swimming, running, cycling etc.

You should slowly and gradually aim to do 150 minutes of moderate intensity (your breathlessness should not interrupt conversation) per week.

OR

75 minutes of vigorous intensity (your breathlessness may interrupt your conversation) per week.

OR a combination of the two in bouts of 10 minutes or more.

Strength training – fatigues muscles quickly and can be done with body weight, resistance bands, or weights (you can replicate weights with tins of beans, shopping bags, or bottles of water).

You should aim to do twice weekly and allow 48 hours rest between training. Perform 8-10 exercises of all the major muscle groups' with 10-15 repetitions and 1-3 sets.




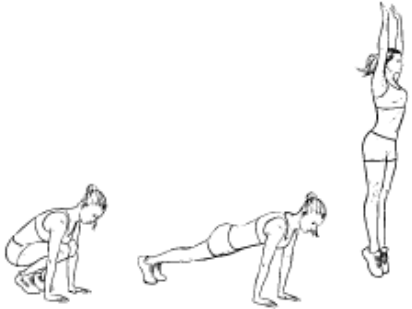

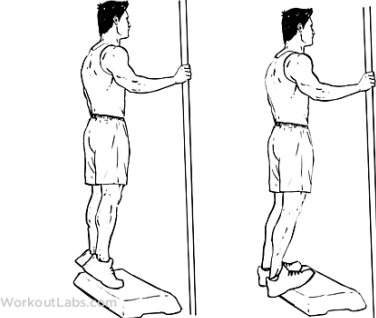
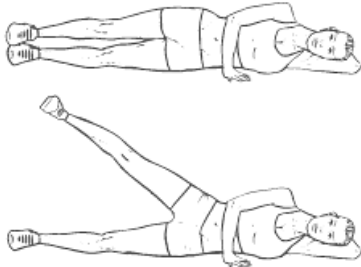


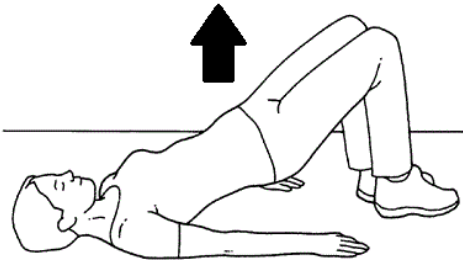
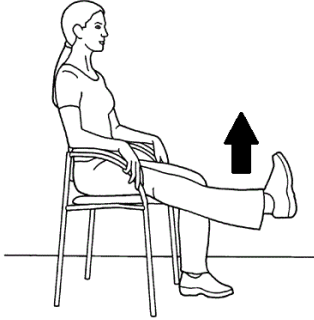

Progression

When you are no longer as breathless or fatigued during an exercise it is time progress e.g. increase walking pace or duration.

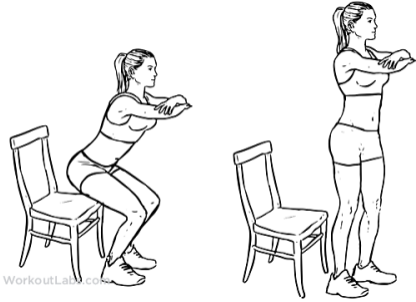
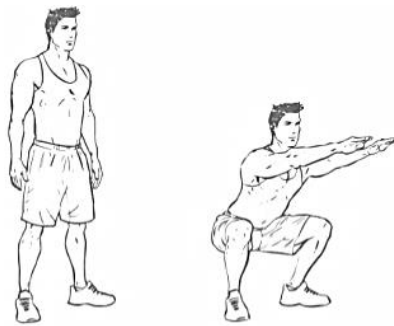
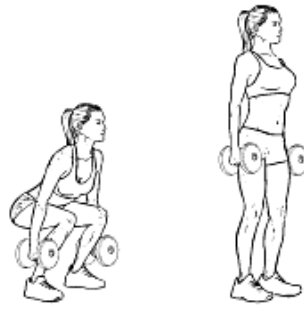
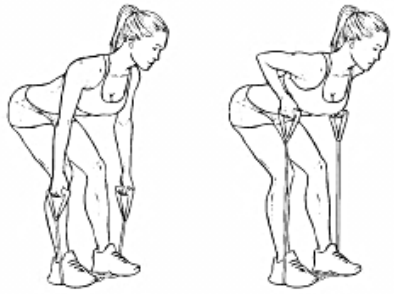
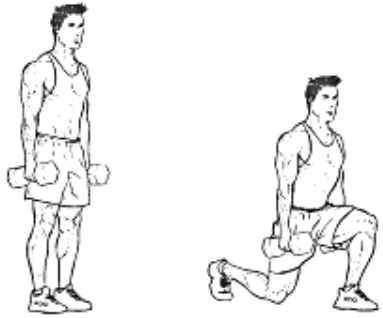
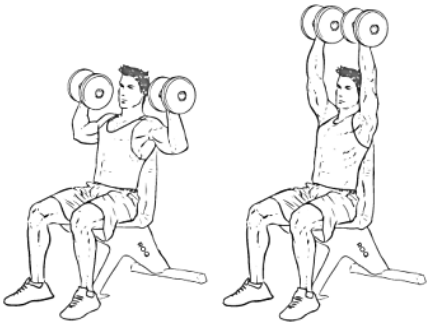
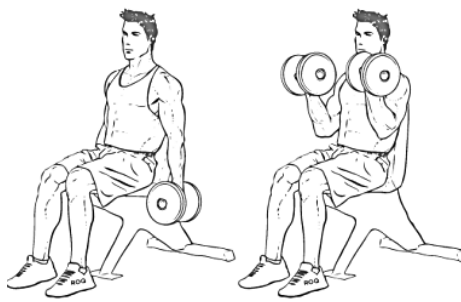
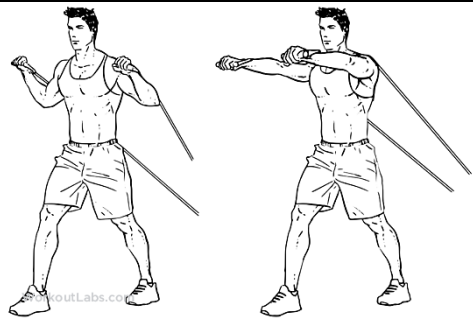
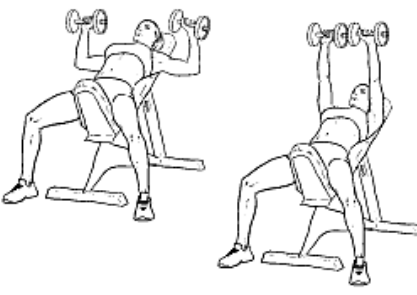
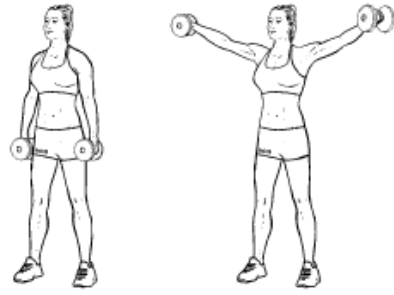

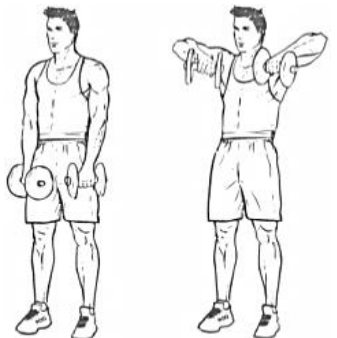
Tips:

- Warm up for 10 minutes before and cool down for 5 minutes after exercise at a light intensity.
- Keep yourself hydrated
- Break up long periods of sitting with exercise
- Eat an hour before exercise

Exercises: regular exercise will improve your exercise tolerance, muscle strength, mental health, and prevent deconditioning

Walk / Run <input type="checkbox"/>	Cycle <input type="checkbox"/>	Step <input type="checkbox"/>	Burpees <input type="checkbox"/>
			
Reach and kickback <input type="checkbox"/>	Calf raise <input type="checkbox"/>	Lying side leg raise <input type="checkbox"/>	Cross body crunch <input type="checkbox"/>
			
Modified push up <input type="checkbox"/>	Bridge <input type="checkbox"/>	Seated leg raise <input type="checkbox"/>	Standing side leg raise <input type="checkbox"/>
			

Exercises:

<p>Sit to stand <input type="checkbox"/></p> 	<p>Squat <input type="checkbox"/></p> 	<p>Dumbbell squat <input type="checkbox"/></p> 	<p>Bent over row <input type="checkbox"/></p> 
<p>Lunges <input type="checkbox"/></p> 	<p>Shoulder press <input type="checkbox"/></p> 	<p>Bicep curl <input type="checkbox"/></p> 	<p>Chest press (standing) <input type="checkbox"/></p> 
<p>Chest press (sitting) <input type="checkbox"/></p> 	<p>Lateral raise <input type="checkbox"/></p> 	<p>Tricep extension <input type="checkbox"/></p> 	<p>Upright row <input type="checkbox"/></p> 

Exercise Diary: complete your exercises and score your Rating of Perceived Exertion (RPE - use page 12). To progress your workload (WL), increase the minutes, sets, or repetitions. These exercises should feel light to between somewhat hard and hard (RPE 11-14).

Session / Day	1.		2.		3.		4.		5.		6.		7.	
Exercises	WL	RPE	WL	RPE	WL	RPE	WL	RPE	WL	RPE	WL	RPE	WL	RPE

Exercise Diary:

Session / Day	1.		2.		3.		4.		5.		6.		7.	
Exercises	WL	RPE	WL	RPE	WL	RPE	WL	RPE	WL	RPE	WL	RPE	WL	RPE

Exercise Diary:

Session / Day	1.		2.		3.		4.		5.		6.		7.	
Exercises	WL	RPE	WL	RPE	WL	RPE	WL	RPE	WL	RPE	WL	RPE	WL	RPE

Rating of Perceived Exertion (RPE)

6	No exertion at all
7	Extremely light
8	
9	Very light
10	
11	Light
12	
13	Somewhat hard
14	
15	Hard (heavy)
16	
17	Very hard
18	
19	Extremely hard
20	Maximal exertion

Psychological Recovery - Understanding anxiety

Worrying about your health, feeling a loss of control and making lifestyle changes due to physical limitations as a result of Covid-19 can leave you feeling stressed and anxious. Worrying thoughts and the fear of breathlessness can release adrenaline in the body which activates the bodies 'fight or flight' response. When adrenaline is not being used to 'fight or flight', you may experience unpleasant mental and physical sensations (which cannot physically harm you) such as:

- Racing thoughts – unable to relax and sleeping difficulties
- Increased breathing rate – this can make you feel dizzy or faint
- Increased heart rate – a pounding or racing in your chest
- Sinking feeling in the stomach – blood is being diverted from your digestive system to your muscles
- Feeling hot with clammy hands – blood moving to your muscles

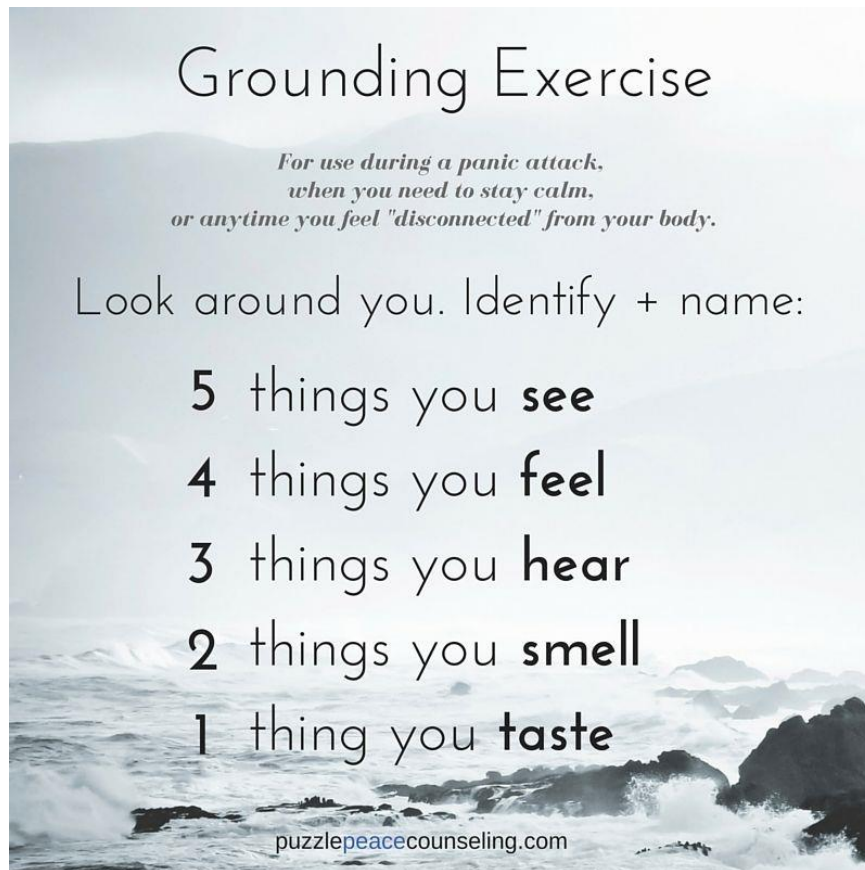
What can I do?

- Talk about how you feel – this helps us to understand better how we feel
- Progression diary – log your daily achievements, no matter how small
- Set manageable small goals – remember you are still recovering, take it easy
- Relaxation exercises – use STOP (below) and read the useful resources links

STOP – something to help you relax

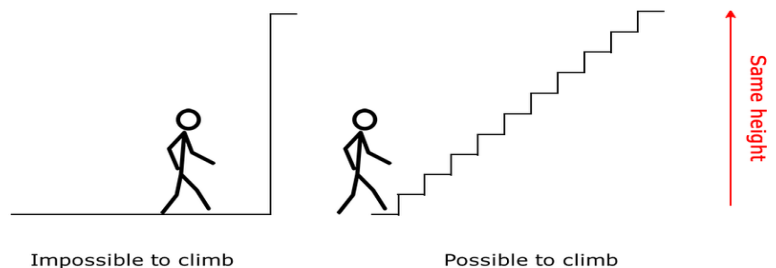


- Whatever you are doing, just pause momentarily
- Re-connect with the breath. The breath is an anchor to the present moment
- Notice what is happening inside and outside of you?
- Where has your mind gone?
- What do you feel?
- What are you doing?
- Continue doing what you were doing
- Or use the information gained during this exercise to change course
- Whatever you do, do it mindfully



Manage your goals

Remember that you are recovering and that you will still feel fatigued. This is a marathon and not a sprint! Set small manageable goals and do a little something every day.



Keep a diary of your progress

Take note of what you have achieved every day; no matter how small! Every small goal is a step in your chosen direction. It may be difficult to remember our progress over time and so recording these achievements will help us to look back and remember how far we have come.

Talk about how you feel

Remember, you are not alone. Everything you feel is understandable. It is important to talk about what you are feeling. Often when we talk about how we feel, we can feel better. Share how you feel with family or friends. If you are continuing to struggle, speak to your GP or other healthcare professionals. They can advise you on how best to seek support. There is lots of support out there.

What's next?

If your symptoms improve and you are confident exercising independently then continue with this. If you require any further guidance then please call the Therapies Department at the Liverpool Heart and Chest Hospital on 0151-600-1950.

Useful resources

- **NHS Lancashire Teaching Hospital:** Covid-19 guidance – <https://bit.ly/358zBqT>
- **Asthma UK and British Lung Foundation:** Post Covid-19 support – <https://bit.ly/3aWuKdB>

Exercise

- **Sport England:** Join the movement – <https://bit.ly/2APAUJS>
- **Fit for me:** Home activities – <https://bit.ly/3cYOejR>
- **Healthiness:** Facebook and Youtube videos – <https://bit.ly/3aiuXaJ>
- **Royal Osteoporosis Society:** Videos for people with osteopenia, osteoporosis, or previous spinal fractures – <https://bit.ly/2XWgajL>
- **Tune in to 10Today:** 10 minute workouts – <https://bit.ly/2XQCxqw>
- **Chartered Society of Physiotherapy:** Being active with a long term condition – <https://bit.ly/2Vllg5Z>
- **NHS:** Physical activity guidelines – <https://bit.ly/2VnShzl>
- **AgeUK:** Looking after yourself physically and mentally – <https://bit.ly/3eF4qrQ>
- **AgeUK:** Keep active and reduce your risk of falling – <https://bit.ly/3aoTMSD>

Nutrition

- **British Dietetic Association:** General advice – <https://bit.ly/2VHi9FR>
- **Friends of the Elderly Group:** Nutrition/hydration – <https://bit.ly/3cwu1B9>

Mind

- **PsychologyTools:** Living with anxiety <https://bit.ly/3bqpiAT>
- **FreeMindfulness:** Mindfulness – <https://bit.ly/3amvl8l>
- **Mind:** Psychological wellbeing during coronavirus – <https://bit.ly/2KIGRX4>
- **Headspace:** 10 days free meditation – <https://bit.ly/34QBpoh>