

# **Covid-19**

## **Rehabilitation Guide**

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## **What is Covid-19?**

Covid-19 is an infectious virus whereby the lungs are mostly affected. Most people infected with the COVID-19 virus will experience mild to moderate respiratory illness and recover without requiring special treatment, however some people will require hospital treatment. This may include ventilator support on critical care or a respiratory care unit.

Typically during recovery people are experiencing breathlessness at rest and during activities. This is a normal symptom for people with Covid-19. This information booklet aims to provide some guidance in terms of ongoing rehabilitation once discharged from hospital, in relation to getting you back to normal.

## **Importance of Rehabilitation:**

Due to your hospital admission or COVID 19 infection, you may feel that your muscle strength and exercise tolerance has reduced and you may find you are struggling with tasks that were just normal before, such as swallowing. This again can be a side effect of certain treatments/interventions that take place in hospital.

With rehabilitation from the specialist members of the multi-disciplinary team this will improve over a period of time. With various professionals involved in your care, the treatments will be focused breathing, functional and physical exercises that will aim to improve your physical and functional well-being to then eventually return to your normal daily routines. Dependent on how weak you are, it is normal to take a long time to recover. What you can do when you are at home is keeping up with exercises and advice provided and getting back to your daily routine as much as possible.

Within the contents of this booklet you will find information from the different professions of the multi-disciplinary team. This will include self help information to help you recover from specific problems. There will be guidance as to who to contact if you have any questions.

**Breathlessness:**

Breathless is a normal sensation experienced by everybody. Due to Covid-19, you may feel this at rest, being active or when feeling anxious. It is important to understand as you recover from Covid-19, mild to moderate breathlessness when you are active is not a bad thing. If you exert yourself and become breathless regularly, as your muscles get stronger and you use oxygen more efficiently, you will start to feel less breathless overall.

**Rate of Perceived Exertion Scale (RPE)**

Think about how breathless you are and rate it out of 10

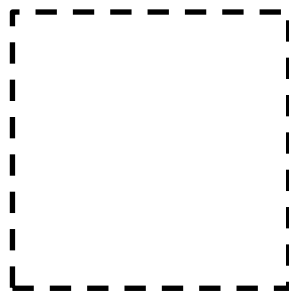
<b>1</b>	Very Light. No problem
<b>2</b>	Very Light. Very easy
<b>3</b>	Fairly light. Fairly Easy
<b>4</b>	Moderate. Beginning to feel puffed
<b>5</b>	Fairly hard. Beginning to feel puffed
<b>6</b>	Hard. Feel puffed
<b>7</b>	Very hard. Tiring
<b>8</b>	Very very hard. Very tiring
<b>9</b>	Exhausted. Out of breath
<b>10</b>	Maximum exhausted

Below are some exercises to help you manage breathlessness and a scale to help you rate your breathlessness.

### **Breathing Control**

- Sit down on a comfortable chair and in a relaxed position
- Place one hand on your stomach
- As you breath in, feel your stomach move out
- As you breath out, feel you stomach return to its original position
- Breathe in through your nose (to filter and warm the air)
- Breath out through your mouth
- Try to avoid using muscles around the ribs and neck area

### **'Square-Breathing' Technique – Helps to focus breathing**



- Focus on a square object or the square above.
- As you breathe in through your nose, follow the line with your finger or eyes
- When you reach the corner, breathe out through your mouth
- Repeat focusing on the square.
- Try to avoid using muscles around the ribs and neck area
- This can be done with a rectangle also. Breathe on the short side and then slow breath out on the long side

### **Pursed Lip Breathing**

- Breathe in, through your nose
- Breathe out with your lips pursed as if you are whistling
- Try to blow out for as long as you feel comfortable

**Positions – to help reduce your breathlessness**

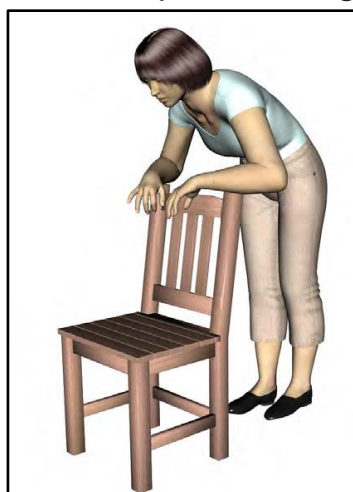
*Sitting:*

Either try forward leaning (keeping your trunk straight) resting your hands / arms on your knees or on a table or sitting upright



*Standing:*

Either try leaning forwards with your hands on your knees or a support e.g. chair, kitchen worktop or walking stick or leaning back on a wall



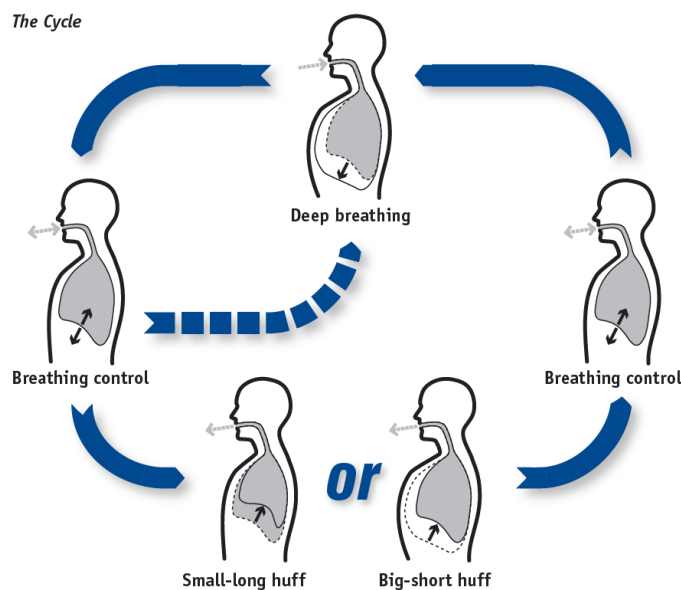
Initially, these strategies can be used to help with breathlessness. In addition, adaptations can be made to your normal routine to help with managing breathlessness. Adaptations include pacing your activities and prioritising what needs to be done.

In the long-term, as previously mentioned exercises that are progressive will help with improving your exercise tolerance.

## Coughing up Sputum

Sputum is also known as mucus, phlegm, spit and/or secretions. Coughing secretions is a normal symptom of Covid-19 and it is important to clear this to improve your oxygen levels and reduce the risk of further infections.

**The Active Cycle of breathing technique can help to clear secretions:**



*Image taken from Association of Chartered Physiotherapists in Respiratory Care (2011)*

### 1. Breathing control – See breathlessness section

### 2. 3x Deep Breaths

- Sit in a relaxed position and take a slow deep breath in, filling your lungs with air to the bottom of your chest
- Hold the breath for as long as comfortably possible, normally a couple of seconds
- Sniff in through the nose to fill the lungs with a little more air
- Breathe out steadily and normally

### 3. Huffing

- Sit in a relaxed position and take in a medium sized breath
- Open your mouth and force the air out, as if you were trying to steam up a mirror

Repeat two to three times; If you hear wet noises in your upper chest, try a cough to see if you can clear any sputum

**Postural Drainage**

By changing positions frequently and completing the ACBT as above, you help to move the secretions which makes it easier cough up the secretions.

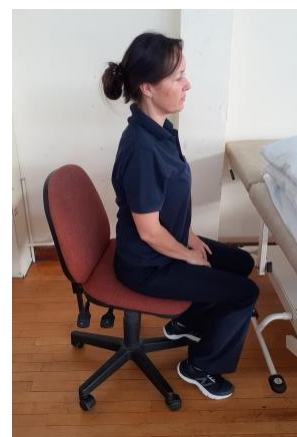
*Lying on your back:*



Lie on your back, support your neck with a pillow

*Sitting upright:*

This can be done in a chair or in bed. Use pillow to support your posture and neck



*Side Lying:*



Lie on your side. Use a pillow to support your neck. Bend your knees slightly.

*Lying on your stomach:*

Lie on your abdomen. Turn your head to one side. Use pillow for your head. You can cross your arms or placed by you head.





**Exercise:**

It is important to introduce regular exercises in your weekly routine and keep moving where possible. This will help to increase your exercise tolerance as well as help you to clear your chest if needed.

When beginning to exercise, consider your 'pre-covid' level walking distance and aim to return to this in the next 2-3 months. Dependent on your level, exercises should be gradually increased over a period of time. It is normal to take 2-3 months or longer.

To help guide you setting regular goals can be used.

For example; week one to aim to walk 2km and time yourself – repeat a further 2 times in the week at this pace, then week 2 to walk the 2km at a quicker pace and again repeat 2 times at this new pace.

Typically when exercising you are aiming to feel slightly breathless – use the RPE scale to help you on page 3, you should be feeling at rate 4-6. As you improve, the RPE will reduce which then you can consider progressing.

During your admission, you may have been referred to the Community Therapy team. These are services than can help you progressing exercises or further advice you may require. They can help you progress off walking aids; provide you with personalised plans and more, where appropriate. See back of this booklet for contact details.

**IF YOU FEEL UNWELL DURING THESE EXERCISES THEN STOP AND INFORM THE WARD STAFF (IF YOU ARE IN HOSPITAL) OR GP/TEAM THAT IS REVIEWING YOU (IF YOU ARE AT HOME)**

Who to contact if you require further help/ advice

If you have tried the above advice about breathing, sputum or exercise progression and feel you need further advice/ help please contact your GP for a referral to community physiotherapy



**Exercise Diary**

**Walking record sheet**

You can use this to help keep track of your walking

Date	Minutes of Continuous walking	RPE Score	Date	Minutes of Continuous walking	RPE Score
Week One			Week Five		
Week Two			Week Six		
Week Three			Week Seven		
Week Four			Week Eight		



## Psychological Recovery from COVID-19

“Emotional distress around COVID-19 is **not** a ‘mental illness’: It is an understandable and common human experience.”

People who are recovering from COVID-19 or any critical illness are likely to experience a wide range of emotional states. These could include: shock, anxiety, sadness, anger, helplessness, confusion and many more.



Some people who overcome critical illness may even become elevated in mood because they feel so “lucky to be alive” and may become tempted to overdo things and push themselves too far and too soon.



Some people describe having had a “rollercoaster” of feelings and are surprised that this can continue for a while after they get home. These feelings may change rapidly or seem to stick around and be hard to shake off. Emotions may be closer to the surface and you may be more sensitive than you were before i.e. you may get tearful watching sad films.

**No single person will react the same and it is so important to tell yourself that how you feel right now is normal and understandable as you have just had a very frightening and traumatic time.**

**Common reactions:** These should fade over the first 3 months of your recovery

### ***Delirium***

Some people can experience delirium whilst critically ill. This can be very frightening and confusing at the time and symptoms include not knowing where you are, confusion, seeing or hearing things that are not real and fear that others are trying to harm you. It can help afterwards to know that this is a common experience and talking about it can really help.

### ***Response to trauma***

It is quite normal to have nightmares, flashbacks, sleep issues, and problems with thinking, memory and attention. Memories of receiving oxygen may trigger distress. Reminders of being in hospital such as further appointments, or COVID-19 on the news can also trigger upsetting feelings. You may also be generally jumpy and irritable.

## Anxiety

You may experience common symptoms of anxiety including difficulty relaxing, fast heart rate, sweating, shortness of breath, racing thoughts, tense muscles, etc. You may also feel more anxious when you are alone. Though frightening, anxiety cannot harm you.

Your mind will be more ‘tuned-in’ to bodily symptoms.’ You may worry more about further illness for some time. At first, you may need extra reassurance

## Low mood/ Motivation

It will take time to come to terms with what has happened. You may also be physically weaker and experience fatigue and breathlessness for some time. Having been unable to have visitors may have been incredibly upsetting, as well as fears you may not survive. The outside world feels very different right now and we are living in uncertain times. Routines and usual activities have changed and some of these things may be temporarily lost altogether. Any one or all of these things can contribute to low mood and

### How can I help myself?



It may be tempting to push away thoughts about what happened or avoid talking about it at all times. Whilst it is good not to spend lots of time focusing on it; try not to push thoughts away completely. It can help to talk about your experience or even write about it.



### Self-compassion

- **Be kind to yourself** – you are doing your best in a very difficult time.
- It will take time to recover emotionally as well as physically.
- Expectations of ourselves are often too high – try to lower them.
- Do not pressure on yourself to do things too soon.
- Note your achievements each day; no matter how small.
- If you feel like crying, don’t prevent yourself from doing so. This is a normal way to release your feelings and is not a



sign of weakness.

**Routine**

Plan activities each day that give you a sense of:

Pleasure	✓
Achievement	✓
Connection	✓
Physical Activity	✓

**Stay Connected**



It is crucial to our wellbeing stay safely connected to loved ones e.g. regular telephone calls, messages and video calls.

**Self-care**



- Focus on what you CAN control
- Make time for relaxation
- Keep a good sleep routine and eat a healthy diet
- Make time just for yourself to do things you enjoy
- Get outside in the garden as often as you can
- Learn to accept help from others if it is needed
- Adjust and pace your activities to avoid 'boom and bust'

**Brief Mindfulness: Take Ten Breaths**

Practice it throughout the day, especially any time you find yourself getting caught up in your thoughts and feelings.

- Take ten slow, deep breaths. Focus on breathing out as slowly as possible, until the lungs are completely empty - and then allow them to refill by themselves.
- Notice the sensations of your lungs emptying. Notice them refilling. Notice your ribcage rising and falling. Notice the gentle rise and fall of your shoulders.
- See if you can let your thoughts come and go, as if they are just passing cars, driving past your house.
- Expand your awareness: notice your breathing and your body at the same time. Then also look around the room and notice what you can see, hear, touch, and feel.

*From: Russ Harris (2009) ACT Made Simple*

**Important:** If emotional difficulties continue beyond 3 months after discharge, or they adversely affect your daily life at any point; do not hesitate to contact your GP for further advice and support.

## Eating, drinking and swallowing recovery following COVID 19

You may have been able to eat and drink as you wished while you were in hospital. However, some individuals who have had COVID-19 experience difficulties eating, drinking and swallowing and need extra support. A Speech and Language Therapist can help advise you on how to eat and drink safely.



Eating, drinking and swallowing requires lots of muscles in the face and throat to coordinate for the food and drink to be swallowed safely. You may have been breathless and required oxygen via tubes in the mouth, nose or a mask. This can also make it very difficult to chew and swallow. All these experiences can be very tiring, and can make your muscles weak and uncoordinated. Getting back into eating and drinking safely can take time but there are things you can do to help make it easier:

- Sit as upright as possible when eating and drinking
- Take slow, steady sips or bites.
- Stop and rest if your feeling breathless or tired
- Try smaller, more frequent meals
- Small bites or sips are easier to control
- Softer foods may be easier to chew and swallow
- Eat food you enjoy

## When to seek advice from GP or Healthcare Professional:



If you are experiencing any of the following symptoms:

- Coughing, choking during eating and/ or drinking
- Wet/ gurgly voice
- New episodes of chest infections
- Feeling food or drinks sticking in the throat

## Mouthcare

Some people may experience altered taste, bad breath, dry mouth or a build up of saliva in their mouths when they are in hospital. It is important to try and keep your mouth as clean and moist as possible to reduce the risk of 'bugs' inside your mouth from being swallowed into the body.

helpful hints and tips to keep your mouth clean and healthy:

- Brush your teeth twice a day with toothpaste
- Have frequent sips of water or non-caffinated drinks
- If you wear dentures, clean them twice a day, and remove them when asleep.
- Use moisturising lip balm to prevent lips from getting cracked and sore.
- Avoid alcohol and caffeinated drinks

## Communication and voice



Being able to talk and use your voice effectively is important to us as individuals, especially when we are poorly. What we mean by communication is the ability to think the words and say them as you want. Some people may have found this difficult while they have been unwell, especially if they have had to have oxygen therapy by breathing tubes in the mouth or by wearing a mask. Their voice may also have been affected, with the sound being weak, quieter, hoarse or sounding whispered some of the time. These changes may be affecting your ability to communicate.

Here are a few helpful ideas to try at home:

- Take a deep breath before you speak
- Sit as upright as possible and be comfortable when talking
- Speak in shorter sentences so you are not struggling to breath.
- If you feel tired and your voice sounds weak, stop, rest and try later
- Try frequent sips of water or un-caffeinated drinks



If these strategies are not working after a couple of weeks and you need further advice please get in touch with your GP or healthcare professional for a referral to the adult speech and language therapy team.

Please always follow the advice from your speech and language therapist. If you are unsure please contact them for advice on:

**01535 293641**

Please note this may be an answer machine so please leave a message. We will get back to you as soon as we can but this may not be the same day.

## Improving your nutrition

COVID 19 can cause changes to taste and smell, alongside the symptoms already discussed previously. This can affect your appetite and ability to eat, making it difficult to get the nutrition you need.

If you do have these symptoms, and/or are finding you are losing weight, feeling your muscles are weaker you may need to think about the types of food you are eating.

It is important to be aware of your weight and appetite as losing weight without trying can be detrimental to your health, and could be loss of muscle weight rather than fat. The information following gives advice to help you with this, however if you continue to lose weight without trying or struggle to eat please contact your GP.

If you have maintained your weight during your illness and have a good appetite, you can access information about what foods to include to ensure you are eating well at

<https://www.malnutritionpathway.co.uk/library/covid19green.pdf>

You can access information with tips about how to make the most of your food and improve your nutrition at:

<https://www.malnutritionpathway.co.uk/library/covid19yellow.pdf>

## How to monitor your progress

- If you can, monitor your weight
- Use the self screening tool:  
<https://www.malnutritionselfscreening.org> to see if you are losing too much weight
- If you are unable to weigh yourself, look for other signs of weight loss (for example jewellery and clothes becoming looser)
- Think about your energy levels, is it harder for you to get up the stairs, are you unable to walk as far as you could?

What you need for a balanced diet.

Nutrient	Sources
Protein - healthy muscles, organs and the immune system	Meats, fish, eggs, beans, pulses, tofu and dairy products
Carbohydrates- energy and fibre	Potatoes, bread, pasta, rice, cereals and puddings
Fruits and Vegetables - fibre, vitamins and minerals to support the immune system	Fresh, frozen or canned fruit and vegetables
Dairy foods - calcium and other important minerals for healthy bones and teeth	Dairy products such as milk, yogurt, cheese, cream and fromage frais
Fluids	All fluids (except alcohol) count, try to include nourishing fluids such as milky drinks or juices



You can **contact the Nutrition and Dietetic Department at Airedale General Hospital on 01535 294758** for support if you are worried about losing weight. One of the dietitians will contact you by telephone to give you specialist advice tailored to your needs. The dietitian will be able to assess if you require special nutritional supplements to help you recover.

## **Returning to normal Function**

During your recovery from COVID 19 you may find yourself experiencing functional challenges, eg unable to get washed and dressed independently or make meals independently. Experts in holistic rehabilitation, occupational therapists have a vital role to play in addressing the debilitating effects of COVID-19. By offering a personalised and occupation-focused approach to care, they can support your recovery from the virus and its treatment, especially if you have been on the Intensive Care Unit (ICU).

### **Environment**

Your environment will have an impact upon each stage of your rehabilitation, supporting or hindering your performance or ability to participate. Occupational therapists will consider how you can adapt to the physical environment and how the environment may be modified, but the social environment is very important in this context with barriers such as personal protective equipment (PPE) and ongoing social isolation.

### **Occupation**



Working with you and, when appropriate, your family members and carers, occupational therapists support you to identify valued occupations, establish goals and participate in interventions that facilitate recovery and rehabilitation of daily living skills. For people who have received intensive treatment for COVID-19, this will inevitably start with personal care, but supporting you to achieve an occupational balance throughout your stages of recovery will support motivation and wellbeing.

How an Occupational therapist can help

- Early rehabilitation to promote mobility and function.
- Work with you to set functionally specific goals.
- Assess your current ability and provide advice, education and equipment if required to maximise your independence
- Activity analysis and grading of tasks to support gradual regaining of function for people with limited exercise and activity tolerance
- Advice on management of breathlessness and fatigue. Consider grading and pacing of tasks, and teach energy conservation strategies
- Facilitate autonomy and control through adaptation of, bed controls and engagement in routine, timetabling and goal setting.
- Management strategies for anxiety symptoms, including referral to appropriate psychological services in liaison with MDT.
- Consideration of low mood and strategies to improve mood, including timetabling and engagement in enjoyable activities.



Who to contact if needing Occupational therapy input

If you feel you are struggling with your functional tasks, you are fatiguing easily throughout the day, or you have struggled more than you anticipated when returning home please contact your GP who can refer you to community occupational therapy.