

## Physiotherapy in primary care after Covid-19 Rehabilitation programme

**Dry cough** Your airways can stay irritated for a long time after your pneumonia. Try breathing in through the nose and out through slightly pursed lips. You can also try drinking some water.

**Wet cough** It is easier to cough up phlegm if you have a lot of air in your lungs. It is best to sit up, take a slow deep breath (not maximum) in through your nose before you cough. You can also try breathing out as if you were fogging up a mirror. Remember to cough hygienically: cough phlegm into a tissue that you throw away. Wash your hands frequently and long with soap.

**Optimise oxygenation** When you remain bedridden for a longer period of time, there is a risk of a partially collapsed lung. This is primarily counteracted by not staying in a reclining position during the day. Change your position in bed if you are unable to get up. Raise the head of the bed. You increase your lung volume by sitting, standing or walking as often as you can.

**Vertigo** Vertigo is common after a long period in bed. Prepare your body before sitting or standing up. Move around in bed, move your feet and legs, take it easy and step by step when you need to stand or sit up.

**Weakness** Especially the large muscle groups are quickly weakened (calves, thighs and buttock). Do a small amount of exercise several times per day rather than everything at once. Respect your limitations. Exercise by doing everyday activities.

**Reduced stamina** It is only natural that you are feeling weak after what you have been through. Increase the amount of exercise gradually. Do a small amount of exercise several times per day rather than everything at once. Start by increasing the amount of time you are able to strain yourself and being active.

**Coughing due to physical strain** Coughing is not necessarily an indication that something is wrong. You may have phlegm that needs to come out. The cough can be a natural reaction to strain, as you take deeper breaths during activity than rest. If your physical activity is limited by coughing, it is important to start exercising very slowly. Walk at a very slow pace for 5–10 minutes as warmup in order to allow your airways and body to get used to the activity. Avoid talking and try to continue breathing in through the nose. If you are able to warm up slowly, you can usually continue (the walk or other activity) without coughing.

**Diet** You may be experiencing laboured breathing (due to the illness), which requires more energy. You need to eat well in order to recuperate and manage your rehabilitation. If you are losing weight, we recommend that you contact your health centre to consult a dietician or physician.

## Get started with training

Here are a few tips for exercises; you can do most of them sitting in a chair or standing up – preferably with your feet shoulder-width apart for better balance. We will describe several exercise levels; choose the level you can handle. Be attentive to how your body reacts and consider which exercises suit you. If you lose your breath, take a break before you continue. Breathing out with your lips slightly pursed can ease the shortness of breath when you strain yourself. Start with a few exercises per day and increase gradually until you have regained your previous level of physical activity. It can take weeks or even months before you are completely restored. The exercise must not make you any worse, and you must not exercise if you have a fever and/or sore throat.

## Posture and lung volume

The difference between a good posture and a poor one can be several decilitres of lung volume. Start by standing up straight, take a slow deep breath through the nose, sigh and breathe out.





### Warm-up (goal: around 10 min)

Regardless of how you warm up, it is important to start slow. If you choose to walk for example, do so slowly for 5–10 minutes. Take a break if you need one. An easier alternative: sit on a chair and walk your legs, or sit on a chair and move your feet.

You can also stretch one or both arms above your head, reach as far as you can and breathe out. Then slump down and roll back up one vertebrae at a time. The exercise can be done sitting on a chair. Do not take more than 2–4 deep breaths, you may get dizzy.

### Strength training for major muscle groups (calves, thighs, buttock, back and arms)



**Calf raises** It is good to hold on to something. The exercise can be done on a flat surface or sitting on a chair. Increase the number of repetitions gradually, aim to complete 10 repetitions × 2–3 sets.

**Sit →stand:** It can be good to hold on to something. Start from a sitting position, then stand up and sit down again. This exercise has many variations; aim to complete 10 stands or 10 leg stretches per leg if you choose to complete the exercise sitting down, you can also stand up and bend your legs slightly, repeat 10 times.

**Leg backwards:** It can be good to hold on to something, lift your leg backwards, repeat 10 times per leg.



**Back:** In standing position: lean forward, lift your arms to the sides, repeat 10 times × 2 sets. The exercise can be done sitting on a chair.

**Arms:** Do push-ups against a wall, aim to complete 10 repetitions × 2–3 sets. You can exercise your arms in several ways, for example by using a water bottle as a weight when doing bicep curls.

## Chest mobility

Exercises for chest mobility are important to help you draw deep breaths. Increase your mobility carefully. Repeat the exercises slowly 5–10 times.



**Bar lift:** Lift your bar (broom handle/staff/crutch or similar) above your head as high as you can.

**Side bends:** Stretch one arm above your head and the other one straight down – imagine that you are pushing the top arm as high as you can while pushing the bottom arm as far down as you can. Hunch your back and stretch out again: give yourself a hug, preferably while hunching. Then extend your arms and stretch your back, if you can.

## Fitness

Fitness training can take the form of walks, on your own or using a walker, walking with staffs, cycling on a regular or electric bicycle, or similar. You can do interval training at first: walk, rest, walk, and so on.

Using the scale for shortness of breath/tired legs (see below), you can estimate your breathing difficulty.

We recommend low-intensive training, and that you only allow your shortness of breath during exercise to reach moderate, **i.e. no higher than 3, during the first 6–8 weeks.**

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## For patients who have been treated in intensive care unit

When you leave the intensive care unit, you are moved to a rehab unit for assessment and continued rehabilitation. After you have completed your treatment there, you can return home and if needed stay in touch with the primary care service. If you have had assisted breathing through a ventilator, and you have a hole (stoma) at the base of your throat, air can leak out when you cough. The hole will heal eventually, but before then, you can hold a tissue over the stoma when you cough.

Following intensive care, it is common to experience the following symptoms: tiredness, sadness, depression and muscle weakness. You can also have some strange memories from your time in hospital. The reasons for this include that you have been severely ill and taken many medications. These symptoms will improve, but you may need help. If you have issues with sadness or similar, we recommend that you contact your health centre. After intensive

<b>SHORTNESS OF BREATH /TIRED LEGS</b>	
0	None at all
0.5	Extremely low
1	Very low
2	Low
3	Moderate
4	Fairly high
5	High
6	-
7	Very high
8	-
9	-
10	Very strained

care, some patients still have problems swallowing or speaking in a strong voice. If you are experiencing this, we recommend that you get an appointment with a doctor at your health centre for examination and help. If your symptoms relate to physical strength, balance, circulation and fitness, you can contact a physiotherapist via your health centre. Do not hesitate to seek help via your healthcare provider.