

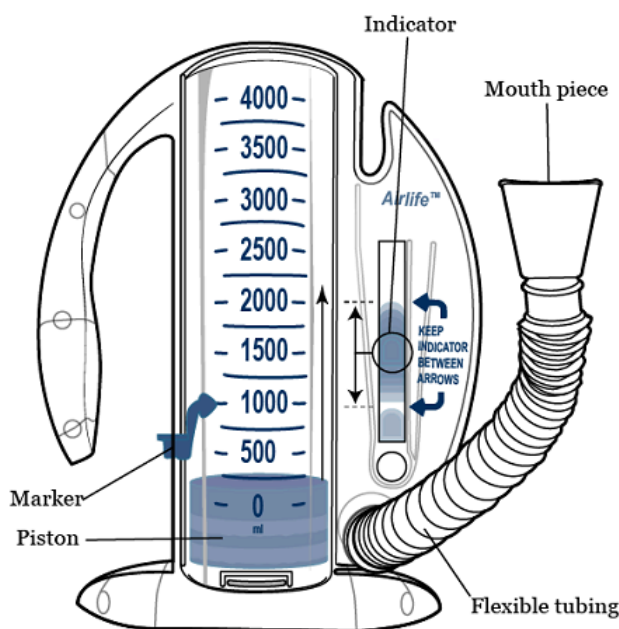
Patient Guide following COVID-19 Infection

This patient guide is meant to help provide guidance about recovering from COVID-19 following your discharge to home. In this guide you will find breathing exercises and a home exercise program to help you restore and maintain your function and mobility at home.

We are grateful for the opportunity to participate in your care and wish you the best in your recovery. Please reach out to our outpatient clinic at **215-663-6677** to address any ongoing rehabilitation needs or concerns.

Incentive Spirometer Use

An incentive spirometer is a device that is used to help your lungs recover after a respiratory illness and/or prolonged period of time of being in the hospital. It helps you breathe deeply to keep your lungs well-inflated and to strengthen your muscles used for breathing.




How to use the incentive spirometer:

1. Sit upright in a chair or in bed. Hold the incentive spirometer at eye level.
2. Place the mouthpiece in your mouth and close your lips tightly around it.

3. Breathe in slowly through your mouth as deeply as you can. As you take the breath, you will see the piston rise inside the large column. As the piston rises, the indicator on the right should move upwards. It should stay in between the two arrows (see Figure above).
4. The goal is to get the piston as high as you can while keeping the indicator between the arrows.
 - **Tip:** If the indicator does not stay between the arrows, you're breathing either too fast or too slow.
5. Once you get it as high as you can, hold your breath for 10 seconds, or as long as possible. While you're holding your breath, the piston will slowly fall to the base of the spirometer.
6. Once the piston reaches the bottom of the spirometer, breathe out slowly through your mouth. Rest for a few seconds.
7. Repeat 10 times. Try to get the piston to the same level with each breath.
8. After each set of 10 breaths, try to cough. Coughing will help loosen or clear any mucus in your lungs.
9. Put the marker at the level the piston reached on your incentive spirometer. This will be your goal next time.

Breathing Exercises

Breathing exercises can help clear the lungs of accumulated stale air, increase oxygen levels and get the diaphragm to return to its job of helping you breathe. Deep breathing exercises are also a great way to reduce stress.



DIAPHRAGMATIC BREATHING

While standing (or lying down), place one hand on your breast bone and one hand on your abdomen near your navel.

Slowly take a deep breath in and focus on trying to get the hand on your stomach to rise while the hand on your breast bone remains still.

As you take a deep breath in, the hand on your stomach should rise. When you breathe out, the hand on your stomach should lower. Video # VVY9LXMLA

Repeat 10 Times

Complete 3 Sets

Hold 1 Second

Perform 1 Times a Day



DEEP BREATH HOLD

Take a deep breath in through your nose and hold it for a few seconds. Then breathe out through pursed lips. Breathing out should take longer than breathing in.

Repeat 10 Times
Complete 2 Sets

Hold 1 Second
Perform 1 Times a Day



PURSED LIPS BREATHING TECHNIQUE

Breathe in for a 4 second count and through pursed lips, breathe out for an 8 second count. Video # VV82LBCUP

Repeat 10 Times
Complete 1 Set

Perform 1 Times a Day

Stretching Exercises



Seated Side Stretch

Sit with your knees at 90 degrees and your feet flat on the floor. Reach your right arm over your head towards the left and grab hold of a door frame. Allow your head to lean to the left. Take four deep breaths in through your nose and out through your mouth. Return to sitting in a neutral position. Repeat three more times. Be careful not to twist your body as you reach by ensuring your shoulders are both facing forward during the entire exercise. Repeat on the left side.

Repeat 4 Times
Complete 4 Sets

Hold 4 Seconds
Perform 1 Times a Day



UT Stretch

This exercise can be done in sitting or standing. Tilt your neck to the side while making sure your shoulder is down. To ensure that the shoulder is in the down position, grab onto the edge of the chair or keep your shoulder internally rotated (behind the back). Give yourself overpressure with the opposite arm (if tolerated). Hold for 10 deep breaths and repeat 3 times on each side (alternating left and right).



Overhead Stretch

- a. Start off by standing up straight with your hands at your sides and feet shoulder width apart.
- b. Lace your fingers together and raise your hands up towards the ceiling with your palms facing up.
- c. Fully stretch your torso and hold for a count for 8, then return back to the starting position.

EXERCISE PROGRAM

A prolonged hospital stay can have a significant impact on your physical, cognitive, and mental health as well as a decline in your normal day to day function. Hospitalization leads to deconditioning which is the generalized weakness and/or loss of fitness due to regular bed rest and inactivity. Deconditioning also impacts your cardiovascular and respiratory systems. Rehabilitation and exercise can help restore the function lost due to deconditioning.

Benefits of regular exercise:

- Improved cognition
- Improved quality of life
- Decreased resting heart rate
- Help reduce risk of anxiety and depression
- Improved sleep
- Increased endurance
- Improved cardiovascular health

General instructions:

- Perform all exercises with a phone nearby, or when someone else is in the home, in the event that you develop concerning symptoms (i.e. chest pain, shortness of breath, dizziness) or are unable to tolerate a certain exercise.
- If you do not have a pulse oximeter, listen to your body. If you can talk during exercise, you are most likely not over exerting. If it is difficult to talk, then stop to take a break to catch your breath.
- If you have Pulse Oximeter, use it to monitor your oxygen level and heart rate while you perform all exercises. Your goal is to complete each exercise of each phase with your oxygen level above 88%. Stop if it drops below 88% and contact your physician or Home Care therapist (if applicable).
- Consult with your physician if you are unsure about your participation in exercise.
- Stop immediately if you feel significant shortness of breath, chest pain, palpitations, lightheadedness, dizziness.



Chair Squat

Standing in front of chair with at least 6 inches between you and the chair. Squat down until you lightly touch the chair then return to upright position. Your feet should remain flat on the floor. As your butt goes back your head and chest must come forward to counter the weight. If you feel off balance and are fall back into the chair try increasing your forward lean. Reaching hands forward can help with proper weight shifting.

Repeat 10 Times

Complete 3 Sets

Perform 5 Times a Week



STAIR TAPS

Stand next to stairs and tap R foot up to stair and then lower down. Repeat tapping with L foot. Go back and forth tapping stair.

Hold onto rail for safety and progress from holding on, to fingertip touch, to hovering hand over rail.

Repeat 20 Times

Complete 2 Sets

Perform 1 Times a Day



Bridges

Lie on your back with your knees bent and heels close to your bottom. Slowly push up through your heels and raise your hips towards the sky until your body is in one straight line from your shoulder to your knee. Squeeze your glutes at the top and hold it for three seconds and slowly lower back to the floor and repeat!

Repeat 20 Times

Hold 3 Seconds

Complete 4 Sets



Standing marching in place-Supported

Stand facing your kitchen countertop. Place 1 or 2 hands on the counter for support. Begin marching in place, bringing your left knee up then down, followed by your right knee up and down. Continue alternating legs in this manner for the duration of the exercise.

<https://my.clevelandclinic.org/health/articles/4302-incentive-spirometer>

<https://www.mskcc.org/cancer-care/patient-education/how-use-your-incentive-spirometer>

https://www.hep2go.com/print_card.php?userRef=mioegclilgk

Aerobic Exercise

Walking is a great way to exercise and improve your conditioning following discharge to home. Walking can be done indoors or outdoors (using proper social distancing precautions).

You should gradually work up to an exercise session lasting 20 to 30 minutes, at least 3 to 4 times a week for optimal health benefits. Exercising every other day will help you keep a regular exercise schedule.

1 - 10 Borg Rating of Perceived Exertion Scale	
0	Rest
1	Really Easy
2	Easy
3	Moderate
4	Sort of Hard
5	Hard
6	
7	Really Hard
8	
9	Really, Really, Hard
10	Maximal: Just like my hardest race

Cardio Rate of Perceived Exertion

How to set cardio intensity

Complete 10-15min of cardio 2-3x/week. Cycling, elliptical, treadmill, swimming and all good options, whatever you enjoy most.

Aim for a 4-6 intensity on the above scale. When you are exercising at a 4/10, you can talk, but you need to breath in between sentences. At a 6/10 you cannot talk easily, but you also do not need to stop.

Duration 10 Minutes

Perform 3 Times a Week

Nutrition

Good nutrition is essential for recovery. Eating healthful meals and snacks as well as drinking plenty of water will help you maintain or increase your strength and recover well. In the hospital, you may have had to follow a special diet due to certain health problems. Your health care team from the hospital will give you instructions if you need to continue with this diet after leaving the hospital.

Mental Health

Recovering from COVID-19 can cause anxiety, depression, post-traumatic stress disorder and other medical diseases that affect thinking and motivation. This can be a significant part of the recovery process.

Tips for psychological wellbeing:

- Engage in regular communication with family and/or friends to promote social connections and emotional support.
 - This can be done using phones, videoconferencing, email, etc. in order to maintain social distancing.
- Move and exercise during the day, which will help you feel more tired at night.
- Participate in meditation or practice mindfulness.
 - Guided meditation applications, such as Headspace or Calm, can be useful.
- If you feel too overwhelmed, talk to your clinician.
- Get at least 7-8 hours of sleep at night.

Tips for Sleep Hygiene

- Avoid going to bed too early in the evening (i.e. before you're tired). Get into bed when you're tired.
- Avoid stimulants, drinks high in sugar (such as soda or fruit drinks), caffeinated beverages, power drinks, and nicotine products, as these products can negatively impact your sleep.
- Avoid alcohol.
- Avoid stimulating activities before bedtime (i.e. exercise, video games, TV).
- Attempt to reduce (less than 30 minutes) daytime naps.
- Engage in daytime physical and mental activities (within the limits of current functional capacity).
- If you are unable to fall asleep, get up out of bed and engaging in an activity that is non-stimulating (i.e. reading a book already read, or a magazine that is not cognitively stimulating).
- Consider wearing eye mask at bedtime.

Remember: wash your hands frequently and use a mask when you are outside of your home.

To schedule a **telehealth rehabilitation appointment**, please call **215-663-6677**.

To schedule **outpatient therapy**, please visit **MossRehab.org/Scheduling**.



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