



Post COVID-19 Patient Information Packet



Recovery after Coronavirus...

- Ways you might feel
- How to aid recovery
- Manage your symptoms

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Life after COVID-19

Recovery from COVID-19 may take time. The length of time needed will vary from person to person.

It's important not to compare yourself to others. Ongoing symptoms could last for several months after you contract COVID-19, and this can be perfectly normal.

Post-COVID-19 effects could include:

- Muscle weakness and joint stiffness
- Extreme tiredness (fatigue) and a lack of energy
- A persistent cough (with or without phlegm)
- Loss of appetite, weight loss, and swallowing difficulties
- Problem sleeping and nightmares/flashbacks, particularly if you have been in an intensive care unit
- Memory problems—for example, not being able to remember some events, not being able to think clearly, or being forgetful
- Changes in your mood, anxiety, or depression

This packet provides helpful techniques for managing some of the more common post-COVID-19 symptoms.

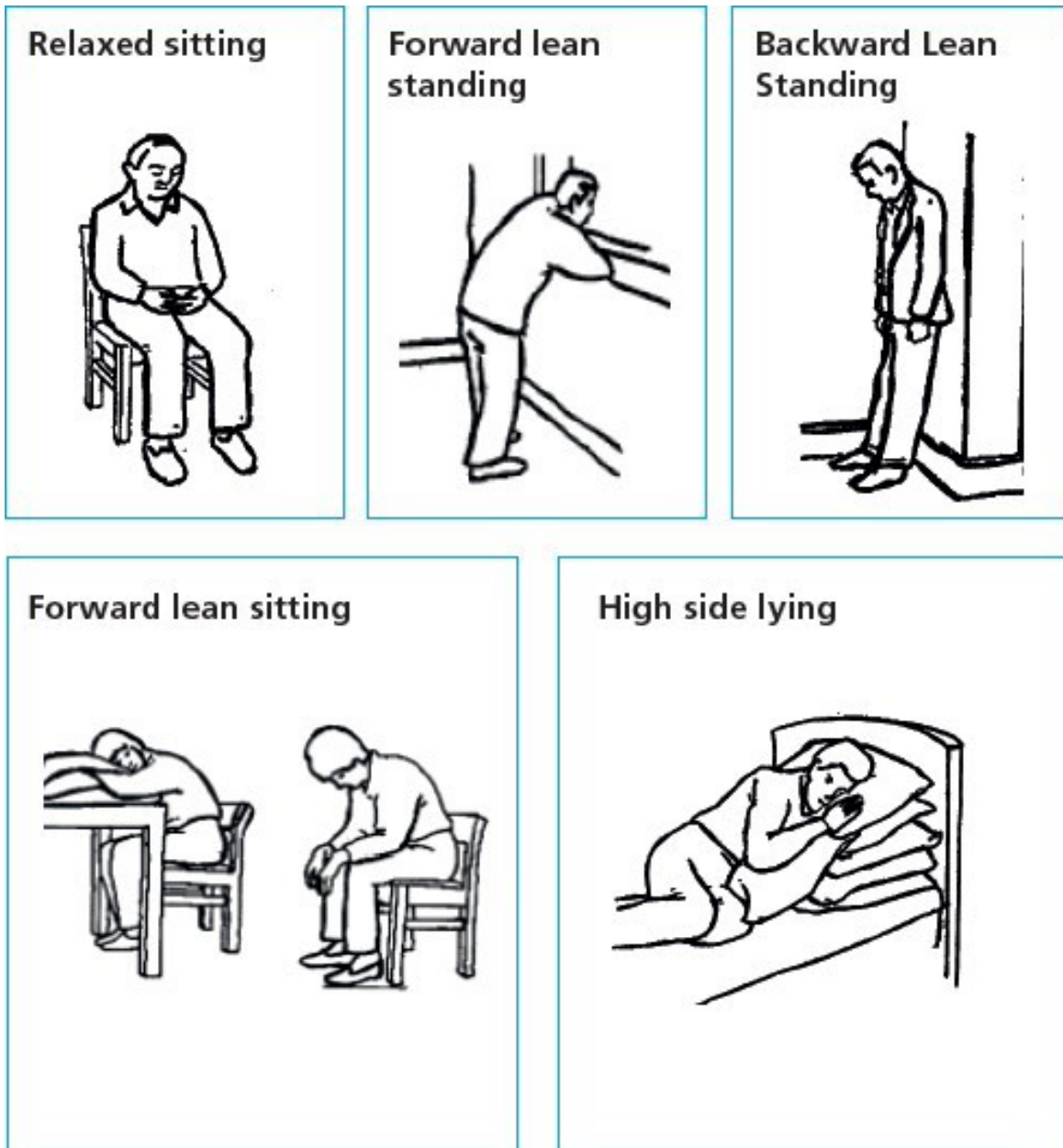
Acknowledgments

Adapted with permission from the Oxford Health NHS Foundation Trust. To view the original, please visit oxfordhealth.nhs.uk/publication/coronavirus.

POSITIONS TO EASE BREATHLESSNESS

After COVID-19 infection, you may find you have continued breathlessness. You should monitor this, and, if it gets worse, contact your primary care provider.

These positions can help ease your breathlessness and can be used when resting or when active.



EXERCISES TO HELP MANAGE YOUR BREATHING

Breathing exercises can help you manage your breathlessness and reduce its impact on your everyday activities.

Breathing control

- Take a slow breath in through your nose.
- Try to relax your shoulders and neck.
- Allow the air to fill up from the bottom of your lungs to the top of your chest.
- Breathe gently out through pursed lips (as if you were going to make a candle flicker) to create space for the next breath in.



Breathing control while walking

This will help you walk on flat and hilly surfaces and climb stairs. Try to keep your shoulders and upper chest relaxed and use your breathing control. Time your breathing with your steps.

- Breathe in—1 step
- Breathe out—1 or 2 steps

Keep cool

Make sure you have good air circulation in the room by opening a window or door. This can help reduce the sensation of breathlessness.

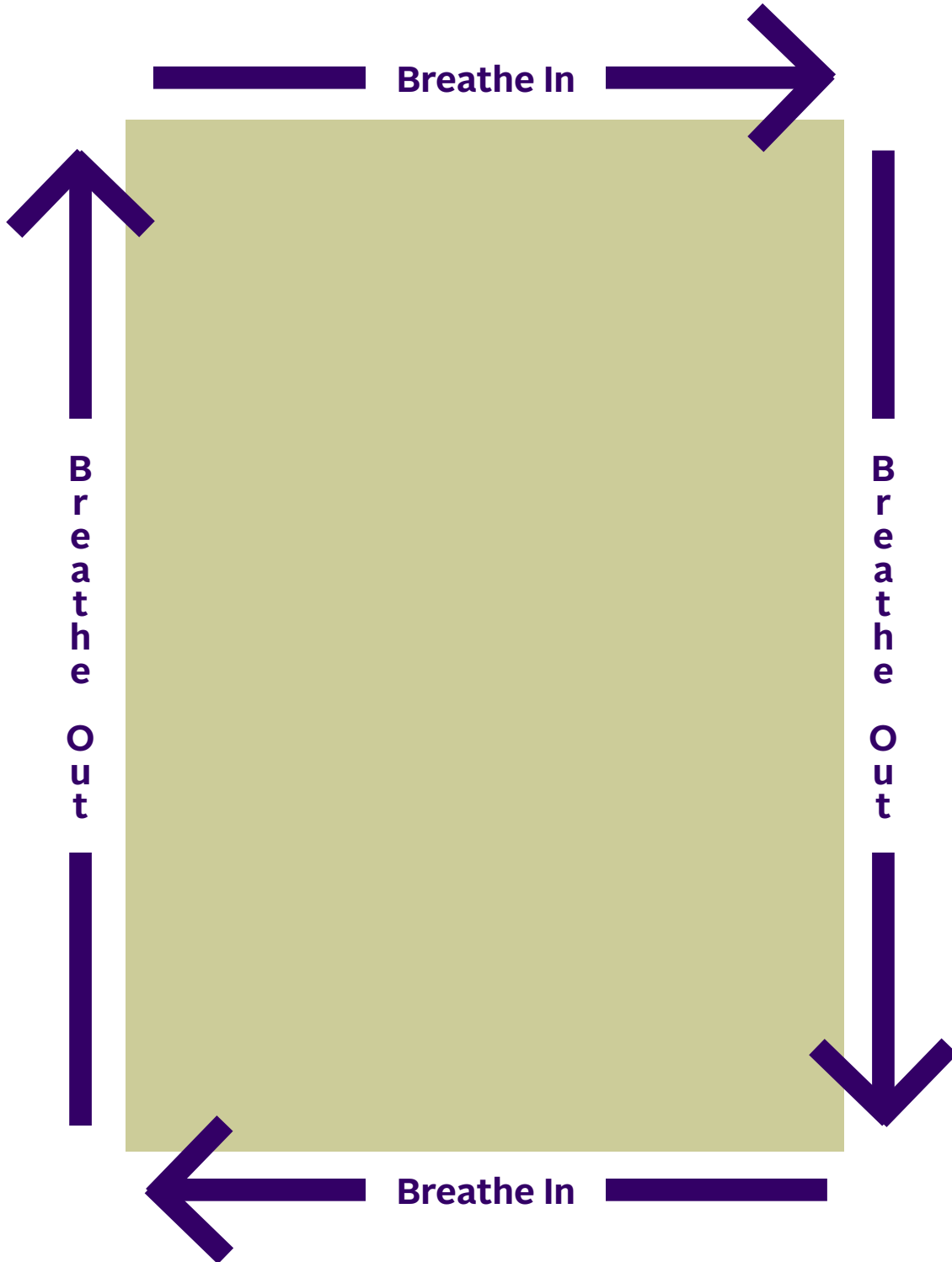
NOTE: Additional oxygen will not make you feel less breathless!

Breathe a rectangle

Find a comfortable position.

Look for a rectangle shape in the room you are in, for example a window, door frame or TV screen.

Move around the sides of the rectangle with your eyes, breathing in on the short sides and out on the long sides.



MANAGING YOUR COUGH



A dry cough is one of the most commonly reported symptoms with COVID-19; however, in some cases, it may be productive and have phlegm.

Dealing with a dry cough

- Stay well hydrated.
- Take small sips, one after the other, avoid taking large sips.
- Use a humidifier in your home and bedroom at night.
- Drink warm tea with honey and lemon — this can help to soothe your throat.
- If you do not have a drink at hand, but need to cough, try swallowing repeatedly. This can work in a similar way as sipping water.

Dealing with a productive cough

- Stay well hydrated.
- Use a humidifier.
- Try lying on either side, as flat as you can. This can help drain the phlegm.
- Try moving around; this will help to move the phlegm so that you can cough it out.

Exercises to help clear your chest

After COVID-19 infection, you may find that you have a cough and phlegm in your chest. These exercises and positions can help clear your chest.

Breathing control

- Breathe in and out gently through your nose if possible.
- If you breathe out via your mouth, use 'pursed lips' (see p. 4).
- Do as many of these as you can and try this technique between other exercises.

Deep breathing

- Take a slow breath in through your nose if you can.
- Try to breathe out gently, like a sigh.
- Don't exceed 3-5 deep breaths in a row as it may make you feel light-headed or dizzy.

Small-Long Huff

This huff is to move phlegm from lower down in your chest to higher up.

Take a medium breath in and then huff out through an open mouth as though you're trying to mist up a mirror.

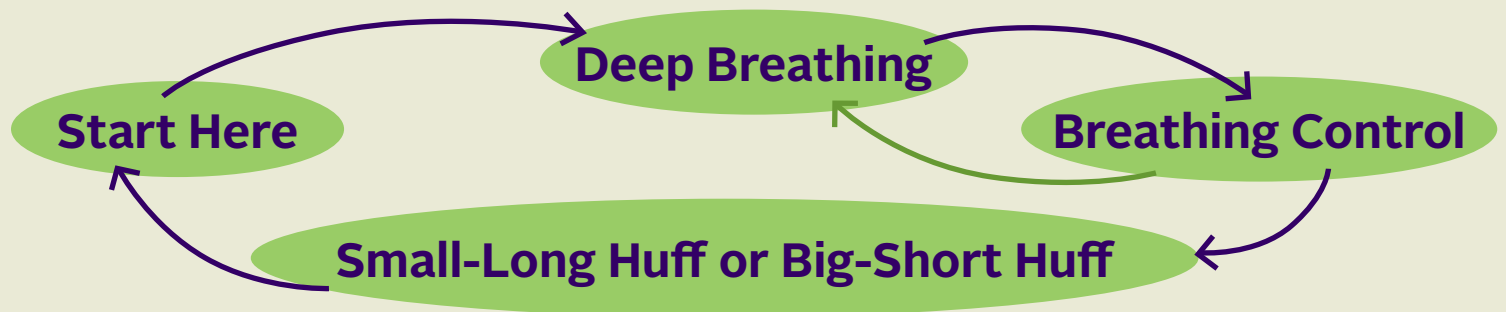
Big-Short Huff

This huff is to move phlegm from higher up in your lungs.

Take a deep breath in and then huff out quickly.

This should clear your phlegm without needing to cough.

Active Cycle of Breathing Technique



If huffing doesn't clear your phlegm, then you may need to cough.

Avoid long coughing fits as they can be tiring, give you a sore throat, and make you feel breathless.

You should clear your chest regularly. If you're producing more phlegm, you may need shorter but more frequent sessions.

Remember to drink plenty of fluids—this will make it easier to cough up the phlegm

Positions to help keep your chest clear

Use the positions on this page along with the active cycle of breathing techniques (p. 7) to help clear your chest.

However:

- Don't use immediately before or after a meal.
- Stop if you have any side effects.
- Choose the position below that you feel would best drain your lungs.

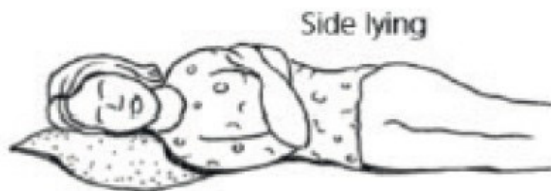
Do not try these positions if you have:

- Nausea
- Acid reflux
- Become significantly breathless
- Have blood in your phlegm
- Have had a recent chest, spine, or rib injury
- Feel wheezy

If you have any of the above, please speak with a healthcare professional before trying these positions

To drain the upper lobes

- Sit comfortably in an upright position. If you are breathless, you may be unable to tolerate these 'head down' positions, so the following may be used:



To drain the lower lobes –

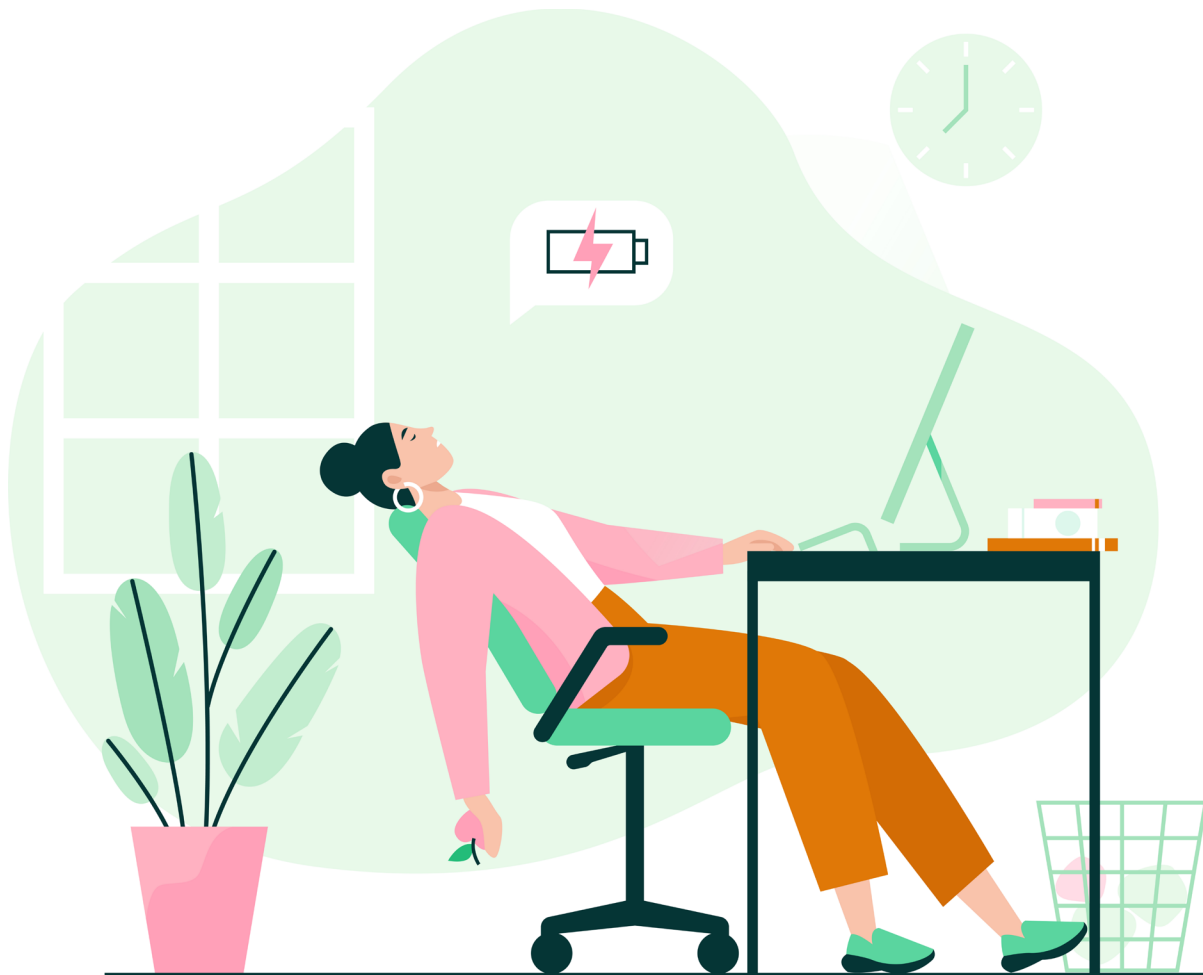
- Lie on your right lobe side with two or three pillows under your hips:



To drain the middle lobes –

- Lie on your right lobe side with one to two pillows under your hips:





FATIGUE FOLLOWING COVID-19

COVID-19 is a new coronavirus.

We are on a steep learning curve about how it behaves, and the guidance is constantly evolving, but we are learning more as time goes on.

We are discovering that a small proportion of people experience a range of ongoing symptoms after infection with COVID-19, including overwhelming fatigue.

They are finding that they are not able to return to previous levels of energy and health in the weeks following infection.

Some degree of fatigue or weakness is quite common after a viral infection. This is known as post-viral fatigue.

Often this fatigue is short-lived, and people return to normal after a few weeks, but for some a full return to health can take months rather than weeks.

From our current knowledge of post-viral fatigue and similar viral infections such as SARS, there are some general techniques for managing fatigue that can help support the natural recovery process.

The initial phase

If you have or have had COVID-19, it is likely that you will experience fatigue as a symptom.

This is the body's normal response to dealing with an infection.

For most, the infection and initial fatigue will be a mild to moderate with recovery occurring over a week or two.

During this initial phase, it is important to:

- **Sleep**—You may find that you need to sleep much more. This is normal during an infection, so sleep as much as you feel you need.
- **Rest**—This allows your body to focus on dealing with the infection. In this situation, rest means periods of time during the day doing very little, physically or mentally. Even low-level activity such as watching TV or reading may need to be paced or minimized, depending on your level of illness.
- **Eat and hydrate**—Eat and drink a little and often if you can, increase your fluid intake if your appetite is low, sipping water regularly throughout the day.
- **Move**—If you feel well enough, move at regular intervals throughout the day to keep your body and circulation moving. This could be simple stretches either in your bed or chair if you are unable to walk around.
- **Pause your work/education**—Allow yourself to fully recover from the initial infection before returning to your previous activity levels.



The recovery phase

When people start to feel better after an infection, it is often tempting to return to previous levels of work, leisure, and social activities.

However, if fatigue and other symptoms are continuing it can be important to do this slowly and gently. Don't try to 'push through' what you feel you can manage easily.

The most important aspect of managing post-infection fatigue is giving yourself time for recuperation. This requires a combination of rest, relaxation, and gentle activity.



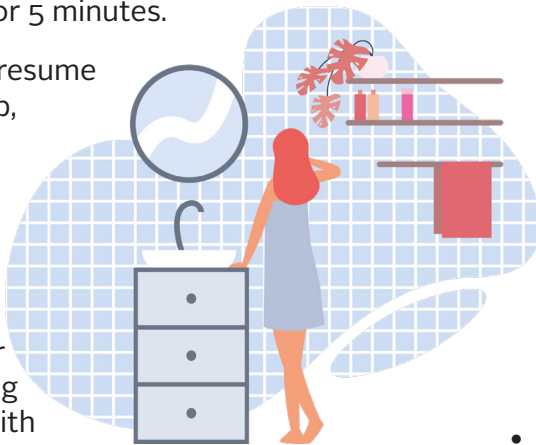
In practice, this involves:

- **Activity management**—Balance periods of low-level, gentle activity with periods of rest. You could start with some light activity or tasks followed by longer periods of rest. Mix up the physical and mental activities throughout the day.



- **Setting limits**—Finding the right balance of activity is individual to you and the stage that you are in your recovery. Establish a suitable activity level and duration, then try not to exceed it. For example, unload just the top layer of the dishwasher or check through emails for 5 minutes.

- **Routine**—Try to resume a pattern of sleep, mealtimes, and activity. Avoid doing too much on a good day. Overdoing it can exacerbate fatigue and other symptoms. Having a basic routine with some flexibility can help you determine when you are ready to start increasing your activity level. A regular routine can also help you sleep better.



- **Rest**—Your body will continue to need rest to heal and recover. You may find that you do not need to rest for long periods like you did initially, but shorter periods of rest throughout the day may be helpful. Take as much time to rest as you need.
- **Relaxation/meditation**—Adding in approaches such as mindfulness or relaxation/breathing techniques can help to aid restorative rest. There are many useful resources online.



- **Sleep**—We encourage resuming your sleep routine, but you may need to sleep longer for ongoing healing following an acute infection. You may find that a short daytime nap for 30 – 45 minutes not too late in the afternoon is helpful.
- **Diet**—Maintaining a healthy diet with regular fluid intake will help improve your energy levels. If possible avoid caffeine and alcohol as much as you can.
- **Mental well-being**—Looking after your emotional health is another important factor in managing fatigue. We know that stress and anxiety can drain the energy battery very quickly. We know that fun and pleasurable activity can help both well-being and energy levels, so build these into your activity plan. This can be something small, such as chatting with a friend or watching your favorite TV show.
- **Work/education**—Don't return to work or school too soon after the initial viral symptoms of fever or cough have subsided in order to give yourself a little time to recover. You may find a phased or gradual return helpful, for example, starting with just mornings every other day and slowly building up over the next few weeks.
- **Exercise**—Depending on the stage of your recovery, some exercise may be helpful. This might be some gentle stretches or yoga or a short walk. For people who usually do a lot of exercise, it is important to only do a small fraction of what you would normally do and at a gentle pace. Resume exercise slowly and gradually increase over time as your illness improves.



Post infection:

You may be starting to feel better after a few weeks and over time you may feel able to increase your activity gradually.

Resist pushing through the fatigue and maintain some degree of routine, rest, and activity.

In most cases, people do eventually recover from post-viral fatigue after a period of convalescence, but it can sometimes take many months.

However, if your health is not improving, or if you continue to experience persistent symptoms after a few months that interfere with your capacity to carry out normal everyday activities, it is advisable to speak with your primary care provider.

Your healthcare provider can help ensure there aren't any other causes for your fatigue.

THE EMOTIONAL IMPACT

Contracting COVID-19 can be frightening. It is understandable that the experience may have an emotional impact on you.

Whether you have had mild or more severe symptoms, these are some common difficulties that you may be having:

- Feeling anxious when breathless
- Worries about health or about family or friends getting ill
- Feeling down
- Poor sleep

If you were hospitalized, you may also experience:

- Unpleasant images from your stay, that might seem to come 'out of the blue'
- Nightmares
- Feelings of panic with any reminders of the hospital

What can help?

- Avoid watching too much news or social media if it is making you feel anxious; try limiting yourself to looking at the news once a day.
- Talk to family and friends.
- Try to do activities that you find enjoyable and relaxing.
- Don't be too hard on yourself if there are some things you find harder to do; remind yourself that recovery takes time.
- Focus on what is in your control, like eating well.
- If you continue to feel overwhelmed by your symptoms, speak to your primary care provider.

**For URGENT help, please contact the SAMHSA's National Helpline
— 1-800-662-HELP (4357)**

RELAXATION TECHNIQUES

Relaxation is an important part of energy conservation.

It can also help you to control your anxiety, improve the quality of your life, and reduce pain and discomfort. Below are two relaxation techniques you can use to manage anxiety and help you relax.

Grounding techniques for when you feel anxious

Take a few slow breaths and ask yourself:

- What are five things I can see?
- What are four things I can feel?
- What are three things I can hear?
- What are two things I can smell?
- What is one thing I can taste?

Think of these answers to yourself slowly, one sense at a time spending at least 10 seconds focusing on each sense.

Picture yourself somewhere calm

Think of somewhere relaxing and peaceful. It could be a memory of somewhere you've been or a made up place.

Close your eyes, and think about the details of this place. What does it look like:

- What colors and shapes can you see?
- Can you hear any sounds?
- Is it warm or cool?
- What does the ground feel like?

Spend some time imagining each of these.



MANAGING CHANGES TO YOUR SWALLOWING (DYSPHAGIA)

After or during COVID-19 infection, you may experience problems with your swallowing. This can impact your eating and drinking as well as your saliva production.

Common signs of difficulty:

- Repeated chest infections
- Choking or coughing during or after eating or drinking
- Difficulties with chewing foods or a feeling of something stuck in the throat
- A wet or gurgly voice after eating and drinking
- Prolonged mealtimes
- Food/drink spilling from the nose or mouth
- Pain on swallowing
- Losing weight unintentionally
- Difficulties managing saliva

Physical weakness due to loss of muscle mass during illness has been seen in COVID-19 patients and can impact your ability to feed yourself, chew, or safely swallow food, drink, and saliva. After COVID-19 infection, you may also experience:

- Tiredness during mealtimes and general fatigue
- Changes to taste and sense of smell

These problems may take some time to recover and should be supported by a speech and language therapist.

We may recommend you change the foods you are eating or the consistency of your drinks to support safe eating and drinking.

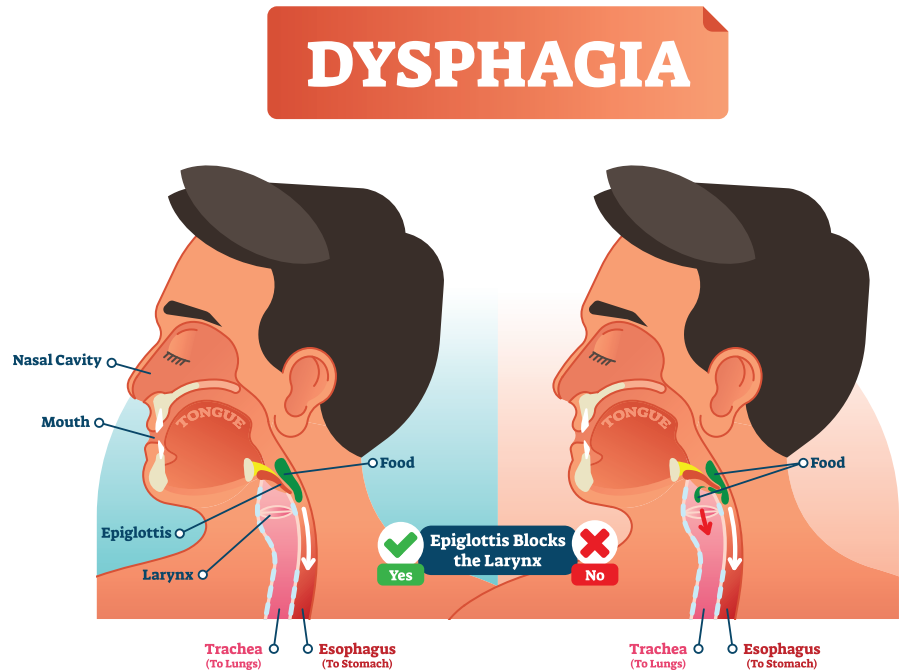
We can discuss managing excess/not enough saliva with you and your primary care provider.

Problems with swallowing can also be associated with dehydration and malnutrition so it is really important to inform your primary care provider of any impairment that may need to be assessed.

If changes to swallowing are significant, you may need to have short or long-term supplementary tube feeding to support recovery.

Swallowing difficulties may be persistent if long-term respiratory support is needed such as oxygen therapy or ventilation.

This may also make you more vulnerable to further chest infections. Other changes to respiratory function post-COVID can include chronic cough.



Things you can try:

- Sit as upright as possible for eating and drinking.
- Take your time and focus on eating and drinking (e.g., turn off the TV).
- Avoid straws or cups with lids unless otherwise advised.
- Ensure any dentures fit correctly.
- Keep your mouth clean with regular teeth brushing and good oral hygiene.

CHANGES TO YOUR VOICE

As a result of the COVID-19 virus, you may experience some changes to the sound of your voice and your comfort and effort levels when using it.

These changes are similar to changes you would expect to experience with a cold or flu but may be more intense and longer lasting. We anticipate that these voice problems may take 6–8 weeks to gradually resolve.

During your illness, you are likely to have coughed excessively for prolonged periods, which brings your vocal cords forcefully together and can leave them swollen and inflamed. This makes them less able to vibrate freely and changes the sound of the voice. Your voice may sound rough or weak, and speaking may require some effort.

Changes to your breathing as a result of COVID-19 can impact the sound or function of your voice. Intubation can also contribute to changes in voice due to complications such as:

- Oedema (swelling) and ulceration of the vocal cords
- Vocal fold palsy
- Acute and long-term impaired voice quality including weakness, hoarseness, vocal fatigue, reduced pitch, and volume control

Things you can try:

- Keep well hydrated. Drink 1½–2 liters of fluid each day, unless advised otherwise by your healthcare provider. Avoid caffeine and alcohol.
- Try gentle steaming with plain hot water. Breathe in and out gently through your nose or mouth. The steam should not be so hot that it brings on coughing.
- Avoid persistent, deliberate throat clearing if you can and, if you can't prevent it, make it as gentle as possible. Taking small sips of cold water can help to suppress the urge to cough.
- Chew sugar-free gum or suck sugar-free lozenges to promote saliva flow to lubricate the throat and reduce throat clearing. Avoid medicated lozenges and gargles, as these can contain ingredients that irritate the lining of the throat
- Avoid smoking or vaping.
- Talk for short periods at a time. Stop and take a break if your voice feels tired.
- Always aim to use your normal voice; avoid straining to force the voice to sound louder.
- Don't try to whisper, which strains the voice box.
- Avoid attempting to talk over background noise such as music, television, or car engine noise, as this causes you to try to talk louder.
- If you are experiencing reflux, speak to your healthcare provider as this can further irritate the throat.



CHANGES IN COMMUNICATION

Emerging evidence suggests some people with COVID-19 also experience changes in communication abilities that are associated with neurological impairments. You may experience:

- Agitation and confusion
- Impaired consciousness
- Acute cerebrovascular events e.g. stroke or encephalopathy, myopathy/neuropathy and hypoxia (lack of oxygen to the brain)
- Delirium that may persist
- Dysarthria—changes to the clarity of your speech
- Dysphasia—changes to your ability to find words, form sentences, read, or write
- Dyspraxia—changes to how your brain sends messages to your mouth to form sounds or words
- Dysphonia—changes to voice
- Cognitive—communication disorders e.g. changes to memory or planning abilities

Things you can try:

- Speak slowly and with increased effort if your speech is not clear.
- If speaking is challenging, use other methods to communicate such as writing or gesturing.
- Try to maintain a routine to reduce unexpected conversations.
- Care for your voice (see page 15).
- Ask for help from your household with remembering information.
- If you are experiencing fatigue, try to limit effortful communication. This can be supported by routine, a familiar person who will know your wants/needs, and using alternative methods of communication when possible.

SMOKING AND COVID-19

- Smoking increases your risk of infection due to harm caused to your immune system and lungs.
- Smoking is linked with poorer COVID-19 outcomes.
- It is never too late to stop, and you will see benefits within 24 hours.



MANAGING YOUR DIET AFTER COVID-19



You may find your taste changed during and for a period of time following COVID-19; however, it is important to eat and remain well hydrated.

What makes food & drink important?

When our body is fighting an infection, it needs more energy and more fluids to heal; so we need to eat and drink more than we usually would if we were well. When our body is recovering from an infection, it needs more building blocks from protein foods to repair and enough vitamins and minerals.

What can you do to make the most of your food & drink?

Continue to choose foods higher in protein and gradually resume normal activity levels to rebuild your strength.

- Aim to have 3 hand-sized items from the protein group daily
- Aim to have 3 thumb-sized items from the dairy group daily

Protein foods include beans, pulses, fish, eggs, and meat. Try to eat more beans and pulses, less red and processed meat.



If you want to gain weight, choose the full fat and full sugar versions of foods.

How can you get enough vitamins and minerals?

Aim to have 5 handfuls from the fruit and vegetable group each day.

Eat a rainbow: Variety is important. Different-colored fruits and vegetables contain their own combination of vitamins, minerals, and fiber. To get the most benefit, eat one portion from each color group



If you need more help and support, your primary care provider can refer you to a MAHEC dietitian

DIET AND SHOPPING SUPPORT

If you need help accessing fresh and nutritious food, these resources can help.

- **Food and nutrition services**—apply through your county's department of social services or register online at epass.nc.gov
- **Local farmers markets**—online database searchable by city/region; many accept SNAP/EBT benefits, visit appalachiangrown.org
- **MyPlate**—online healthy eating guide, tips, and recipes from the U.S. Department of Agriculture, visit myplate.gov
- **NCCARE360**—online database of resources including emergency food assistance, prepared meals, food pantries, and community markets, visit nccare360.org/resources
- **Supplemental Nutrition Assistance Program**—Buncombe County seniors can contact the Council on Aging at (828) 277-8288 for assistance enrolling in this program

PHYSICAL ACTIVITY FOLLOWING COVID-19

Spending time in the hospital or being ill at home with COVID-19 can result in a significant reduction in muscle strength, particularly in your legs, due to inactivity.

It's not harmful to get out of breath when engaging in physical activity, this is a normal response.

However, if you are too breathless to speak, slow down until your breathing improves. Try not to get so breathless that you have to stop immediately. Remember to pace your activities.

You might start with any exercises recommended to you in the hospital or by your healthcare provider or physical therapist.

When you are doing physical activity, it is okay to feel moderately breathless

Breathlessness	
0	Not at all
0.5	Very, very, slightly (just noticeable)
1	Very slightly
2	Slight
3	Moderate (able to say 5 words before taking a breath)
4	Somewhat (able to say 2-3 words before taking a breath)
5	Severe
6	
7	Very Severe
8	
9	Very, very severe (almost maximal)
10	Maximal

Make sure you keep doing recommended exercises regularly; however, if you are unsure, contact your healthcare provider.

Do not overdo it, try to increase your activity levels slowly.

WHAT IF MY SYMPTOMS DO NOT IMPROVE?

The length of time that it takes to recover from COVID-19 varies from person to person, for some it will be days, others weeks or months. The more severe your symptoms, the longer it might take for you to return to what is normal for you.