



lung health  
foundation

# Living with COPD





## **About this resource**

About two million Canadians live with chronic obstructive pulmonary disease (COPD), but as many as one million more may have it without even knowing it.

In this resource, we will be highlighting strategies that can help you manage your COPD, stay out of the hospital, and live a full and active life.

## **About the Lung Health Foundation**

The Lung Health Foundation is dedicated to ending gaps in the prevention, diagnosis, and care of lung disease in Canada. We invest in the future by driving groundbreaking research, and we give patients and their families the programs and support they need today. Lung health starts now!

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## What is COPD?

Chronic obstructive pulmonary disease (COPD) is a disease that affects your lungs. COPD makes it harder to breathe, which can lead to shortness of breath and feeling tired.

COPD includes two types of lung diseases —**emphysema and chronic bronchitis**.

### Emphysema

At the end of the airways (air tubes) in your lungs are tiny air sacs called alveoli. When you breathe in, the alveoli inflate (fill) like a balloon, then deflate (empty) when you breathe out. With emphysema, the walls of the alveoli are damaged. This makes them less elastic and less able to deflate. Therefore, stale air gets trapped in your lungs, making it harder to breathe in fresh air. This is called “air trapping.”

### Chronic bronchitis

With chronic bronchitis, the lining of your airways becomes red and swollen and produces too much mucus (phlegm). This can block your airways, making it more difficult to breathe. It can also cause you to cough, and to cough up mucus.

## Risk factors for COPD

Most people who have COPD currently smoke, or have smoked in the past. Smoking is the cause of 80 to 90 per cent of COPD cases, though you can also develop COPD even if you have never smoked. You are also more likely to develop COPD if you smoke and have a family history of the disease.

These factors may also increase your risk of having COPD:

- Second-hand smoke exposure
- Air pollution
- Workplace dusts and fumes
- Genetic factors (e.g., alpha-1 antitrypsin deficiency, a rare genetic disorder)
- Cooking and heating with wood in homes with inadequate ventilation

**Regardless of your smoking history, you deserve support!**

Our Lung Health Line is free, confidential, and non-judgemental. Speak to a Certified Respiratory Educator at

**1-888-344-LUNG(5864)**,

email us at

**info@lunghealth.ca**, or visit

**lunghealth.ca** to chat live.



## How is COPD diagnosed?

COPD symptoms can start out mild –so mild, that you may not notice them at first. Many people also think that feeling short of breath is a normal part of aging, but it is not. Any regular symptoms should be checked by your healthcare provider.

See your healthcare provider to be checked for COPD if you:

- Smoke or have smoked in the past
- Have any COPD symptoms (shortness of breath, cough, coughing up mucus, wheeze, chest tightness) at rest, during the night, or during activities such as climbing stairs
- Have colds that last longer than those of other people

The diagnosis of COPD is based on:

1. Medical history
2. Physical exam
3. Tests

## Medical history

Your healthcare provider will ask you about:

- Symptoms you have been having and for how long
- Irritants you have been exposed to (e.g., cigarette smoking, workplace exposures)
- Related health issues of you and your family members

## Physical exam

Your healthcare provider will:

- Look at your breathing patterns
- Listen to your breathing with a stethoscope
- Look for signs of COPD around your chest/lung area and other areas of your body



## Tests

Spirometry is a simple breathing test that measures the speed and the amount of air that you are able to blow out of your lungs. **Spirometry is the most important part of diagnosing COPD.**

Other tests may include:

- Other lung function tests
- Oxygen saturation - device placed on your finger that measures oxygen in your blood
- Imaging (e.g., chest x-ray, CT scan)
- Blood tests

# Manage your COPD

Learn how to manage your COPD well to help reduce your symptoms, reduce your risk of having a flare-up, and improve your quality of life. Here are some effective strategies to help you take control of your COPD.

## Live a smoke-free life

If you smoke, **quitting is the most important step** you can take to slow the progression of COPD.

Quitting smoking has many other benefits, including:

- Easier breathing
- Less coughing
- Better blood circulation
- More energy
- Lower risk of lung cancer and heart attacks
- Thousands of dollars in savings per year
- Looking and feeling younger

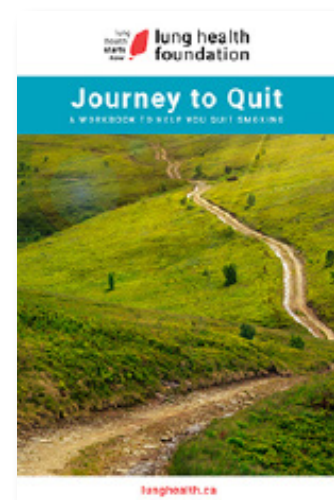
**Did you know?** Cigarette smoke contains over 7000 chemicals, with 69 known to cause cancer.

## Strategies to help you quit

Only you know when you are ready to become smoke-free. Every person is unique. Find a way to quit that's right for you. Here are some strategies that can help.

### Seek advice

- Ask your healthcare provider for advice
- Find a quit smoking counseling program
- Ask friends and family for help
- Contact our Lung Health Line and speak with a Certified Respiratory Educator about quitting. Call **1-888-344-LUNG (5864)**, email **info@lunghealth.ca**, or visit **lunghealth.ca** to chat live.
- Use the **Journey2Quit workbook** to help you set up your quit smoking plan





## Avoid irritants

### Second-hand smoke:

- Keep your home smoke-free
- If you smoke, smoke outside
- If someone else in your home smokes, ask them to smoke outside until they are ready to quit

### Wood smoke:

- If possible, don't burn wood (e.g., fireplaces, wood stoves) or yard waste (backyard burning)
- Use a wood burning appliance with advanced technology and ensure it is installed by a professional and maintained well
- Ensure that you have good ventilation to help reduce smoke exposure

### Outdoor air pollution:

- Monitor air pollution levels and adjust your outdoor activities as needed
- Check the air quality health index (AQHI) at [airhealth.ca](https://airhealth.ca)
- Exercise indoors when outdoor pollution levels are high

### Dusts and fumes:

- Certain dusts and fumes can trigger COPD symptoms and some may be a cause of COPD

### Cold temperatures:

- Wearing a scarf or cold weather mask may help to warm up the air you breathe
- Exercise indoors if the cold air causes symptoms



## COPD medications

How much medication and the types of medication prescribed for you will depend on the severity of your COPD. Milder COPD requires less medication than more severe COPD.

Most COPD medications come as an inhaler (puffer). Some COPD medications are in pill form. Work with your healthcare provider to find the right treatment plan for you. Ask your healthcare provider to explain how the medications work and why they are prescribed for you. Talk to your healthcare provider about any concerns you have about the medications, including side effects or cost. Let your healthcare provider know if you are using any non-prescription medications/treatments, including any alternative therapy.

Learn how to use your inhalers properly. Review how to use your inhaler at every visit with your healthcare provider. You can find instructions on how to use inhalers at

[lunghealth.ca/how-to-use-an-inhaler](http://lunghealth.ca/how-to-use-an-inhaler).

## Bronchodilator inhalers

Bronchodilator inhalers help to reduce your shortness of breath. They open up your airways to make it easier for you to breathe.

These short-acting bronchodilator inhalers are usually taken as needed for quick relief of symptoms:

- *Bricanyl Turbuhaler*
- Salbutamol metered dose inhaler (MDI) (e.g., *Airomir*, *Ventolin*)
- *Ventolin Diskus*

They are sometimes called “reliever” inhalers.

*Atrovent* MDI is a short-acting bronchodilator inhaler that is usually taken every day, up to 3-4 times per day.

These long-acting bronchodilators are taken regularly, usually once or twice per day:

- *Foradil Aerolizer*
- *Onbrez Breezhaler*
- *Seebri Breezhaler*
- *Spiriva Handihaler*
- *Tudorza Genuair*
- *Incruse Ellipta*
- *Oxeze Turbuhaler*
- *Serevent Diskus*
- *Spiriva Respimat*

## Combination inhalers

Combination inhalers contain two or three medications in one inhaler. If you require two or three medications every day, a combination inhaler makes it easier to take than with separate inhalers. A bronchodilator can be combined with a different bronchodilator and/or with an anti-inflammatory corticosteroid. A corticosteroid may be prescribed along with a bronchodilator if you are having COPD flare-ups (exacerbations).

These combination inhalers are taken regularly:

- Advair Diskus
- Breo Ellipta
- Duaklir Genuair
- Symbicort Turbuhaler
- Ultibro Breezhaler
- Anoro Ellipta
- Combivent Respimat
- Inspiroto Respimat
- Trelegy Ellipta

## Other medications

Corticosteroid pills (e.g., prednisone) are very good at reducing inflammation in your lungs, but have many possible side effects. They are sometimes prescribed for several days when you have a flare-up (exacerbation). In some cases, a lower dose of corticosteroid pills may be prescribed on a daily basis.

Antibiotics are sometimes prescribed to treat bacterial infections. They don't work if the infection is caused by a virus. They are usually prescribed for a short period of time but in some cases, they can be prescribed long-term.

Daxas is a daily pill that can reduce inflammation in the lungs. It is sometimes prescribed for those who have severe COPD, a lot of mucus (phlegm), and a lot of flare-ups (exacerbations).

N-acetylcysteine (NAC) can help to loosen and thin the mucus (phlegm) in your lungs to make it easier to cough up. If you have a lot of mucus, NAC may help to reduce your risk of having a flare-up. Ask your healthcare provider if NAC is an option for you.

## Exercise regularly

Regular exercise is a very important part of your overall health. Having a daily exercise routine will allow you to do more, use your energy more efficiently, and feel less short of breath. Speak with your healthcare provider about an exercise plan that's right for you.

## Benefits of exercising

The potential benefits of exercise include:

- Less shortness of breath
- More energy
- Improved physical fitness
- Maintaining a healthy weight
- Increased muscle and bone strength
- Better mood, less anxiety
- Stronger immune system



## Types of exercises

### Aerobic exercises

Aerobic exercise involves working a little harder, feeling a little more out of breath, and increasing your heart rate. It helps to build endurance. Choose exercise options that you enjoy. As you progress, you may want to change the type of exercise.

Make a goal for your daily aerobic exercise. 30 minutes of aerobic exercise each day is recommended. Start slowly with 10 to 15 minutes of exercise, taking breaks as needed. Add in 1 to 2 minutes every week or two. This will let you slowly work your way up to 30 minutes.

Examples of aerobic exercises include:

- Walking (indoors, outdoors, treadmill)
- Bicycling or using a stationary bike
- Swimming

## Strengthening (resistance) exercises

Strengthening exercises focus on keeping your upper and lower body muscles fit. Light weights and resistance bands (e.g., TheraBands) are commonly used. When you start doing these exercises, you may want to do them without any weights or resistance bands, then add them over time. Do the exercises slowly –it should take 3 to 5 seconds to do the movement and return to the starting position. You can also vary the intensity of your exercise by using resistance bands with various resistance levels.

It takes time to build strength. You may only be able to do 1 or 2 repetitions for each exercise when you start the program. Increase the repetitions over time up to doing each exercise 10 to 12 times. Some people forget to breathe when they are focused on these exercises. It is very important to breathe through each step.

## Stretching (flexibility) exercises

After you have completed your aerobic and strengthening exercises, it is important to stretch the muscles and tendons in your body. Stretching will help to improve your flexibility and prevent injuries. When doing these exercises, you should feel your muscles stretching and slight discomfort, but you should not feel pain.

## Tips for staying active

Follow these tips to help you stay active:

- Wear comfortable clothing and proper shoes
- If you are getting short of breath or feel uncomfortable, stop and use your reliever bronchodilator. Do not start exercising until all of your symptoms are gone.
- If needed, take your short-acting bronchodilator inhaler (e.g., Airomir, Bricanyl, Ventolin) about 15 minutes before exercising
- Exercise indoors when outdoor conditions cause symptoms (e.g., cold weather, air pollution)
- When you exercise in cold weather, it may help to cover your nose and mouth with a scarf or cold weather mask
- Exercise different parts of your body each day - for example, exercise your arm muscles one day and your leg muscles the next
- You may find that listening to music while exercising can make it more fun and motivate you




When you exercise, the following can be expected:

- Light to moderate shortness of breath
- Sweating
- Some muscle fatigue
- Light muscle or joint pain

# Scale of Perceived Exertion

You may wish to use the “Scale of Perceived Exertion” to find the right level of exercise for you.

**It is generally recommended to exercise at a level of breathlessness and fatigue between 3 and 5 on a scale of 0 to 10.**

Scale of Perceived Exertion	
<i>Intensity of the Sensation (breathlessness, fatigue)</i>	
<b>0</b> None At All	 <b>0 - 3</b>
<b>1</b> Very Light	
<b>2</b> Light	
<b>3</b> Moderate	 <b>4 - 7</b>
<b>4</b> Somewhat Hard	
<b>5</b> Hard	
<b>6</b>	 <b>8 - 10</b>
<b>7</b> Very Hard	
<b>8</b>	
<b>9</b> Very Very Hard	
<b>10</b> Maximum	

**Level 3** is the lower end of where you should be, where you are breathing easily and you can easily complete the exercise. Try to push yourself a little bit more.

**Level 4-5** is a good level to be at, where you feel that the exercise is a challenge but you can complete it.

**Level 6** is the absolute maximum level where you should be, where you feel short of breath all the time and your body feels pushed hard.

**IMPORTANT** - Do not go over level 6. If you go over level 6, your exercise intensity is too high.

## Interested in learning about exercises that you can do on your own?

Visit [fitnessforbreath.ca](https://fitnessforbreath.ca) or call our Lung Health Line at **1-888-344-LUNG (5864)**. It is recommended that you speak with your healthcare provider before starting an exercise routine.

## Pulmonary rehabilitation

A pulmonary rehabilitation (PR) program teaches you the skills and knowledge needed to better manage your COPD and maintain a full, active life.

PR programs include:

- Guidance and supervision from healthcare professionals
- An individualized exercise program
- Education on managing your COPD
- Social interaction

Benefits of a PR program include:

- Less symptoms such as shortness of breath
- Better health and quality of life
- Improved physical fitness
- Lower risk of hospital admission (if you were recently hospitalized for COPD, joining a PR program after discharge reduces your risk of being hospitalized again!)

Ask your healthcare provider if a PR program would benefit you.



## Prevent infections

Influenza (flu) and pneumonia combine to be the seventh leading cause of death in Canada. People affected by lung conditions such as COPD are at a higher risk from flu and pneumonia infections. One of the most effective ways to help prevent flu and pneumonia infections is with vaccines.

### Influenza vaccines

The flu vaccine is needed every year, since the viruses change every year –and the immunity you get from a flu vaccine decreases over time. The flu shot is safe for almost everyone six months of age and older. If you are 65 years of age or older, the high dose flu shot is recommended. Ask your healthcare provider which seasonal flu vaccine is right for you.

### Pneumococcal vaccines

Pneumococcal vaccines help to protect you against serious infections caused by many different types of pneumococcal bacteria. These infections can include pneumonia, bacteremia (blood infection) and meningitis (infection of the membrane that surrounds your brain and spinal cord).

There are two pneumococcal vaccines available in Canada: Pneumovax® 23 and Prevnar® 13. Ask your healthcare provider about which pneumococcal vaccines are right for you.

The Pneumovax® 23 vaccine is recommended for adults at a high risk of pneumococcal disease (e.g., people with COPD) and those aged 65 or older. A booster dose may be considered for some individuals at least five years later.

Adults who are at a high risk of pneumococcal disease also benefit from the Prevnar® 13 vaccine.

### Other ways to prevent infections

You can further protect yourself when you:

- Wash your hands regularly. When soap and water are not available, use a hand sanitizer that contains at least 60% alcohol.
- Keep your hands away from your nose, mouth and eyes when in public
- Regularly clean common areas of your home (like door handles, light switches, hand rails, taps, remote controls, keyboards)
- Avoid people who have a cold or the flu, and avoid crowded places
- Sneeze and cough into a tissue, then throw it away right after use and wash your hands. If you don't have a tissue, sneeze and cough into your sleeve.
- If you are sick with the flu, stay home from work, school and public places



## COPD flare-ups

A COPD flare-up (exacerbation) is defined as a worsening of your symptoms that requires an increase in medications. Flare-ups can damage your lungs and lead to a decrease in lung function. They can also put you in the hospital. Therefore it is very important to learn how to prevent and manage flare-ups.

The most common signs of a COPD flare-up:

- Feeling more short of breath
- Coughing more
- Change in your mucus:
  - Increase in amount of mucus, or
  - Thicker/stickier mucus, or
  - Change in colour (e.g., more yellow or green)

Other signs of a COPD flare-up can include:

- Fever
- Swollen ankles
- Feeling tired
- Feeling unwell

At the first sign of a flare-up, refer to your COPD Action Plan (see below) and follow the instructions. If you do not have a COPD Action Plan, see your healthcare provider about your symptoms. If the increase in symptoms lasts 48 hours or more, let your healthcare provider know as soon as possible.

A COPD flare-up may be caused by:

- An infection
- Smoking, second-hand smoke
- Air pollution
- Anxiety

**Call 911 or get to an emergency department if you have any of these signs of a severe COPD flare-up:**

- Very short of breath
- Blueish or greyish lips or fingernail beds
- Chest pain
- Confused
- Very tired and drowsy



## COPD Action Plan

A COPD Action Plan is a written set of instructions from your healthcare provider.

Your COPD Action Plan shows you:

- Which medications you should take every day
- How to check if your COPD symptoms are getting worse
- Which extra medications you should also take as soon as your symptoms start to worsen, to help prevent or manage a flare-up (exacerbation)
- When you should see your healthcare provider or seek medical help

COPD Action Plans are often set up like a green, yellow and red traffic light.



### Green Zone

The Green Zone shows you what steps to take when you feel normal.

The Green Zone may include:

- The usual amount and colour of your mucus (phlegm)
- What symptoms (e.g., cough) that you normally have
- Medications (e.g., inhalers, oxygen) that you use every day
- Extra steps to take to help you keep your COPD under control

## Yellow Zone

The Yellow Zone shows you what to do when your symptoms increase.

The Yellow Zone may include:

- What signs to look for that indicate that your symptoms are getting worse such as:
  - Increased shortness of breath
  - Change in your mucus (increased amount, change in colour, or change in consistency/thickness)
- Which extra medications you should take such as:
  - Increased inhaler dose or adding another inhaler treatment
  - Prednisone (pills that help to treat COPD flare-ups)
  - Antibiotics (if a bacterial infection is suspected)
  - If you use oxygen there may be a need for an increase in the flow

## Red Zone

The Red Zone shows you what to do when you have a flare-up (exacerbation).

The Red Zone may include:

- What signs to look for that indicate that you are having a flare-up
- Which medications you should take during the flare-up
- When to see your healthcare provider
- When you should seek emergency medical attention for severe symptoms (e.g., very short of breath, drowsy, confused, chest pain)

## After a flare-up

See your healthcare provider as soon as possible after you've had a flare-up. There may be a need to change your treatment plan. Review your COPD Action Plan at every visit.

## Preventing COPD flare-ups

The following strategies can help prevent COPD flare-ups:

- Take your COPD medications as prescribed
- Get your vaccinations (flu, pneumonia) and take steps to avoid infections (e.g., wash hands regularly)
- If you smoke, become smoke-free
- Follow your COPD Action Plan
- Get regular exercise; join a pulmonary rehabilitation program if available
- Follow the steps described in the **Airway clearance** section to help keep your airways clear of mucus
- If you have had a previous COPD flare-up, ask your healthcare provider if vitamin D supplements would help
- Get regular sleep and have a healthy diet



## Manage anxiety and depression

If you have COPD, anxiety and depression may affect you. Feeling short of breath can cause anxiety. In turn, this anxiety can make you breathe faster and feel even more short of breath. Anxiety and depression increase your risk of having a COPD flare-up.

Here are some ways to help you reduce anxiety and depression:

- See your healthcare provider about treatment options
- Exercise regularly - consider joining a pulmonary rehabilitation program if available
- Try mindfulness meditation (techniques that focus on the present, such as your breathing) or yoga
- Try relaxation techniques such as music or guided imagery (an instructor, recording or script guides you in thinking of relaxing images)

## Reduce fatigue and shortness of breath

Shortness of breath and fatigue are common symptoms of COPD. The following strategies can help to reduce these symptoms.

### General tips

- Learn how to manage COPD through an education program
- Join a pulmonary rehabilitation program (a supervised exercise and education program)
- Take plenty of time to relax
- Dress with comfortable, loose clothing
- Ask for help when needed

### Activities of daily living

- List all the tasks you need to do and put them in order of most important to least important
- Start with the most important tasks. Some tasks may have to wait for another day.
- Plan your tasks. Gather everything you will need (e.g., gardening or cooking tools) first so that you don't have to go back and forth too often
- Do your tasks at a slow, steady pace
- Take lots of breaks
- Sit down as much as possible, since it uses less energy than standing. Try a stool when preparing meals
- Avoid having to reach or bend too often; avoid lifting – push, pull or slide if possible

### Tools to conserve energy

Set yourself up for success by taking advantage of tools that can help you complete tasks using less energy. Try a:

- Walking aid (e.g., rollator)
- Reacher tool for grabbing items that are hard to reach, such as on the floor
- Bath seat
- Raised toilet seat
- Grab bars for the shower, tub and toilet areas
- Cart with wheels to help carry items
- Long shoehorn
- Dustpan with a long handle



## Sleep

Sleep is a very important part of your overall health. Sleep restores energy and mental well-being.

When you have COPD, your sleep may be affected for these reasons:

- Shortness of breath or coughing may make it harder for you to fall asleep or may wake you during the night
- You may find it more difficult to sleep lying flat
- If you have been prescribed oxygen, it can take time to adapt to wearing your oxygen while you sleep
- COPD medications can affect sleep



Tips for a better sleep:

- Plan to sleep around the same time every night and wake up around the same time
- If you find it difficult to sleep lying down, adjust your pillows so that you aren't lying completely flat. It may help if you're a little upright. Some people find a reclining chair helps.
- If you have a short sleep during the day (nap), limit it to about 20 minutes and have it before 3pm. If you use oxygen or a CPAP machine, use them during the nap.
- Don't use electronic devices (TVs, tablets, phones) in your bedroom. Use your bedroom for sleep and intimacy only.
- Regular exercise can help to promote a good sleep. Don't exercise later in the evening since it can keep you awake.
- If you have symptoms during the night (like cough or shortness of breath), ask your healthcare provider about scheduling your bronchodilator inhaler dose before bed

Sleep apnea is more common in people who have COPD. If you feel sleepy during the day or snore a lot while sleeping, ask your healthcare provider about being tested for sleep apnea. If you have sleep apnea, managing it well will improve your sleep and quality of life.

## Techniques to manage shortness of breath

### Pursed lip breathing

Pursed lip breathing can help you to remove stale air from your lungs and can help you to relax. Try to breathe out (exhale) twice as long as you breathe in (inhale). It can be helpful to count to two as you inhale and to four as you exhale.



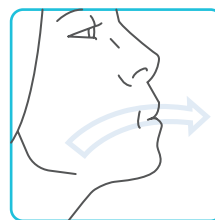
#### Step One

With your mouth closed, breathe in a normal amount of air through your nose.



#### Step Two

Purse your mouth as if you're whistling or making a candle flame flicker gently.



#### Step Three

Keeping your lips pursed, slowly blow the air out through your mouth. Do not strain yourself to force the air out.

### Diaphragmatic breathing

The diaphragm is the main muscle of breathing. It is located between your lungs and your abdomen. When you feel short of breath, try diaphragmatic breathing to reduce your symptoms.

1. Relax your shoulders and sit comfortably with your feet on the floor.
2. Put your hands on your abdomen.
3. Breathe in slowly through your nose and push out against your hands. You should feel your hands moving out with your abdomen.
4. Breathe out through pursed lips letting your abdomen return to rest
5. Repeat a few times then take a rest.

## **Body positions**

Certain body positions can allow your diaphragm (main breathing muscle) to move more easily and reduce shortness of breath.

### **Sitting:**

- Place both feet on the ground
- Lean your head and shoulders slightly forward
- Rest your arms on your knee



### **Standing:**

- Lean your back against a wall, post or counter
- Place your feet slightly apart and a comfortable distance away from the wall, post or counter
- Relax and lean your head and shoulders slightly forward
- Rest your hands lightly on your thighs



## **S.O.S. for S.O.B.**

SOS is an international symbol for asking for help when in distress. SOB stands for shortness of breath. If you are feeling short of breath, the following steps may help:

1. Stop what you are doing.
2. Remain calm.
3. Find a body position (sitting or standing) that will help you to relax. Sitting will use less energy. Lean your head and shoulders slightly forward.
4. Breathe in and out through your mouth as fast as you can.
5. Start to blow out longer using pursed-lip breathing.
6. Try using diaphragmatic breathing when your breathing starts to feel better.
7. Stay there as long as it takes until your breathing feels much better. This could take up to 10 minutes or longer.

If you ever feel very short of breath, call 911 or go to an emergency department.



## Airway clearance

Some people with COPD have extra mucus (phlegm) in their lungs. This mucus can block the flow of air and increase your risk of getting an infection.

Here are some strategies that can help you clear mucus from your lungs.

### Stay hydrated

Drinking lots of water and other fluids can help to keep your mucus thin, which makes it easier to cough up. In the winter, the air in your home can be very dry. A central humidifier system or portable humidifier is often needed to give you enough humidity in the winter. Make sure it is cleaned and maintained regularly.

### Medications

Your bronchodilator inhalers can help to open up your airways to make it easier to clear mucus from your lungs. N-acetylcysteine (NAC) can help to loosen and thin the mucus (phlegm) in your lungs to make it easier to cough up. Ask your healthcare provider if NAC is an option for you.

### Airway clearance techniques

Airway clearance techniques can help you clear mucus from your lungs. Ask your healthcare provider if airway clearance techniques would be helpful for you.

### Airway clearance devices

Your healthcare provider may suggest you try using an airway clearance device (e.g., Acapella, Aerobika). Breathing into this type of device creates a vibration in your lungs designed to loosen the mucus to help you cough it up.

### Controlled cough technique

A common airway clearance technique is called the “controlled cough technique”:

1. Sit and support your abdomen. Good posture is an important first step in being able to cough up your mucus.
2. Take a slow deep breath using your diaphragm (stomach should move outwards) to build up air behind the mucus.
3. Hold your breath for two seconds.
4. Cough twice with mouth open using the “huff” technique. Coughing with your mouth open (huffing) allows the mucus that is deep in your lungs a chance to move from the smaller airways to the larger ones.
5. Follow with one strong cough to clear mucus from the larger airways.
6. Rest.
7. Repeat steps 1-6 as needed.

### Use the controlled cough technique:

- After you wake in the morning, to clear mucus that has built up during the night
- About an hour before you go to sleep so that you might sleep better
- Before exercising
- More often when you have a cold or COPD flare-up

## Healthy eating

When you have COPD, eating healthy foods is very important.

A healthy diet:

- Gives you more energy to do your usual daily tasks (like cooking or cleaning)
- Controls your weight
- Increases your energy for exercising
- Helps prevent infections

## General tips

- For most people, following **Canada's Food Guide** is a great way to make sure you are eating well
- Enjoy foods from all the food groups to ensure you get the nutrients you need
- Limit salt and alcohol
- Increase fibre intake with high fibre cereals, whole grain breads, beans, vegetables and fruit
- Drink plenty of fluids (mostly water)
- Eat fewer processed foods. Processed foods can be high in salt, sugar and saturated fat
- If you have had a previous COPD flare-up, ask your healthcare provider if vitamin D supplements would help
- If you are underweight, see your healthcare provider. A referral to a dietician may be recommended.

## Plan ahead

- Find healthy recipes and make a grocery list of what you need
- When you feel well, make extra meals and freeze them for times when you have less energy
- Ask your healthcare provider if a meal program such as Meals on Wheels may be an option
- You may find it helpful to work with a dietitian on a meal plan. You can contact a dietitian at [unlockfood.ca](https://unlockfood.ca).

## Reducing shortness of breath while eating

If you get short of breath during meals, try:

- Taking your reliever inhaler before meals
- Eating smaller meals throughout the day instead of three big meals
- Cutting your food into small, bite-size pieces
- Eating slowly and chewing foods well
- Limiting drinks while eating
- Eating softer foods
- Allowing yourself plenty of time to eat

## Oxygen therapy

Oxygen therapy may be prescribed for people who have a low level of oxygen in their blood. For those who feel short of breath but have a normal oxygen level, oxygen therapy would not be helpful.

A simple test using a saturation monitor with a probe placed on your finger can give your healthcare provider a general idea of your oxygen level. However, a blood test called an arterial blood gas is more useful and is usually required to decide if you need oxygen therapy.

Oxygen may be prescribed for when you are at rest, when you are active, and for when you are sleeping. Oxygen is a prescribed drug and it is important to follow the prescribed flow rates. Too much or too little oxygen can be harmful.

If you require oxygen therapy, contact your provincial government about funding. Work with your healthcare provider and home oxygen company to find the oxygen equipment that works best for you.

## Manage comorbidities

When you have COPD, you have a higher risk of having certain other health conditions, called comorbidities. It is important to work with your healthcare providers on managing any comorbidities that you may have.

Comorbidities that are more likely to occur when you have COPD include:

- Anxiety and depression
- Heart disease
- High blood pressure
- Osteoporosis (weakened bones)
- Diabetes
- Gastroesophageal reflux disease, or GERD (stomach contents back up into your esophagus)
- Obstructive sleep apnea (pauses in breathing that happen while you sleep)
- Bronchiectasis (airways in your lungs are stretched and damaged)



## Intimacy and sexuality

When you are diagnosed with COPD, you and your partner may find that sexual intimacy is affected. The fear of becoming short of breath may lead to avoiding intimacy. However, intimacy is important for everyone.

Tips to improve sexual intimacy:

- Use your reliever medication prior to sexual activity and when needed
- Clear mucus secretions prior to sexual activity and when needed
- If you use oxygen, keep it on during sexual activity
- Rest before and during sexual activity
- Avoid sexual activity after a heavy meal, after drinking a lot of alcohol, and when you have a lot of stress
- Some positions require less energy than others. Find the positions that work best for you.

If sexual intimacy still makes you too short of breath, simply touching, being touched, and being close to someone can help to ensure love and closeness. Be open with your partner and discuss how to achieve the best possible outcomes for both of you.

## COPD and travel

There can be challenges with traveling when you have COPD. It is best if you do your research and plan well in advance.

Here are some tips to help keep you safe:

- Before booking any travel, discuss your plans with your healthcare provider
- If you use oxygen therapy, prepare well in advance of your travel to ensure that you will have access to your oxygen therapy at all times
- There is less oxygen in an airplane at high altitudes. Even if you don't normally use oxygen, you may need it for flying. Ask your healthcare provider to assess you.
- Ensure that you have enough COPD medications for your whole trip, plus for any delays that may occur
- Ensure your vaccinations are kept current, including for the flu and pneumonia
- If you travel outside the province or country, make sure that you have enough medical insurance

## Work with your healthcare providers

Work together with your healthcare providers. Have regular follow-up visits to ensure your COPD is being managed well. Before each visit make a list of questions or concerns you would like to discuss.

At each visit review:

- Symptoms you have been having, including any flare-ups, and how you manage them
- Treatment plan and your COPD Action Plan
- Your inhaler technique to make sure you are getting the right dose. Watch Lung Health Foundation videos on inhaler technique at [lunghealth.ca/how-to-use-an-inhaler](http://lunghealth.ca/how-to-use-an-inhaler)
- Smoking status and any other exposures
- Your exercise program
- Vaccinations
- Managing your comorbidities (other health conditions)
- Lung function testing referral (every year if you have stable COPD)

You may wish to ask for a referral to a COPD education program, a pulmonary rehabilitation program, or a COPD support group.

## Specialist referral

A referral to a specialist such as a respiratory (lung specialist) may be required if:

- Your healthcare provider is not able to confirm the diagnosis of COPD
- You and your healthcare provider are not able to get control of your COPD
- You are having COPD flare-ups
- Higher medication doses or oxygen are required
- Surgery may be required

### Looking for a support group?

The Certified Respiratory Educators who staff our Lung Health Line can help connect you with the programs you need. Call us at **1-888-344-LUNG (5864)**, email us at [info@lunghealth.ca](mailto:info@lunghealth.ca), or visit [lunghealth.ca](http://lunghealth.ca) to chat live.

## Advance care planning

Advance care planning is the process of deciding what kind of health and personal care you would want in the future if you were no longer able to decide for yourself. Advance care planning is easier to have with your loved ones when you are still well enough to make your wishes known about what you want when you are no longer able to decide for yourself. Don't wait for a health crisis to occur to develop your advance care plan.

“Have a conversation with your family about your end-of-life wishes while you are healthy. No one wants to have that discussion... but if you do, you'll be giving your loved ones a tremendous gift, since they won't have to guess what your wishes would have been, and it takes the onus of responsibility off of them.” ~ Jodi Picoult

Advance care planning includes:

- A “living will”, in which you explain what treatments you want or don't want when you are no longer able to decide for yourself
- Preparing a power of attorney for personal care, in which you choose a substitute decision maker who speaks for you when you can't speak for yourself

## Palliative care

The focus of palliative care is to improve your quality of life when you have a life limiting illness.

Benefits of palliative care:

- Reduced stress
- Improved quality of life
- Emotional and spiritual support to patients and their families
- Help with decision making about end-of-life care

Organizations that can help with advance care planning and end-of-life decisions:

- Advance Care Planning: [advancecareplanning.ca](http://advancecareplanning.ca)
- Canadian Hospice Palliative Care Association: [chpca.net](http://chpca.net)





## Where to learn more

### The Lung Health Line

Our Lung Health Line is open Monday to Friday from 8:30 a.m. to 4:30 p.m (E.T.). You can call us (toll-free) at **1-888-344-LUNG (5864)**, email **info@lunghealth.ca**, or chat live at **lunghealth.ca**.

Our team of Certified Respiratory Educators can help you:

- Improve your lung health with practical tips and tools
- Get the most from your inhalers by improving your technique
- Connect with the support programs and services you need
- Get started on your smoke-free or vape-free journey

Looking for something more structured? We offer a free, phone-based program that can help you understand your COPD diagnosis.



### lunghealth.ca

Visit the Lung Health Foundation online at **lunghealth.ca**. Learn about our programs, sign up for our free e-newsletters, and access our Lung Health Line through live chat.



## Lung Health Foundation

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