Living Well COPD® with

Chronic Obstructive Pulmonary Disease

A plan of action for life

A Learning Tool for Patients and Their Families

Being Healthy with COPD

- Preventing your symptoms and taking your medications
- Managing your breathing and saving your energy
- Managing your stress and anxiety
- Adopting and maintaining a healthy and fulfilling lifestyle
- · Developing and integrating a plan of action into your life



This guide belongs to:

Healthcare professional:

Institution:

The skills you need to manage your COPD

Chronic Obstructive Pulmonary Disease, or COPD, is a disease that can affect every part of your life. The more the disease progresses, the impact can become considerable on your daily activities. The exacerbations of the disease, or periods of symptoms aggravation, are the main cause of hospitalization in people with COPD and can also affect your quality of life. Fortunately, there is a lot that you can do to overcome and prevent these limitations, and improve your well-being. This is why we have created this module on COPD self-management.

How can this program help me with self-management of the disease?

This module is part of the "Living well with COPD" program. This is an educational program in which you learn skills to manage your disease and adopt healthy new lifestyle behaviours. The "Living well with COPD" program has been tested as part of a research project and the results have been very encouraging. Patients who used this program in collaboration with their health professional, "case manager" or resource person and physician had fewer exacerbations needing hospitalization or emergency room visits. Their quality of life also improved, enabling them to do more of the activities they enjoyed, and better live with their disease.

National and international guidelines agree that patient education and self-management are valuable for people with COPD. The self-management program "Living well with COPD", that you can adapt to your own situation, has been created by medical experts in collaboration with COPD patients.

This module is your guide. Use it to write down your questions or concerns. Share it with people close to you so that they can understand what you are going through. Discuss whatever thoughts and feelings you have with your case manager, professionals in your healthcare team and your physician.

Best of luck in your program!

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Welcome to the module "Being Healthy with COPD"

Do you think it is possible to be healthy if you have COPD? It certainly is, but you – and your family – may have to make many changes in the way you do things. Some of these changes may be minor. Others, such as exercising regularly, or eating good food, may take a little getting used to. However, by maintaining healthy new habits, you will have a better chance of fulfilling your physical, emotional and social needs.

Living well with COPD means doing more of the things you like, adopting and maintaining healthy life habits and behaviours in order to improve your quality of life.

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Being Healthy with COPD (Chronic Obstructive Pulmonary Disease)

Even if you have COPD, a chronic illness, you can still be healthy. In other words, knowing your disease and taking charge of it on a daily basis will help you live better with your COPD.



Living Well with COPD

- Preventing your symptoms and taking your medications
- Managing your breathing and saving your energy
- Managing your stress and anxiety
- Adopting and maintaining a healthy and fulfilling lifestyle
- Developing and integrating a Plan of Action into your life

The meaning of being healthy

Living well with COPD is about adopting and maintaining healthy behaviours in your life. You have set a personal goal for yourself to be healthy. You know that this will mean changing your lifestyle and exercising more. You are ready to make these changes but are not quite sure where to start.



To change your lifestyle, you must first define health.

What does health mean to you?

What do you do to stay healthy?

Do you make time for leisure activities? Why?

How can friends and family help you to improve your health?

Do you think a healthcare professional can help you improve your health? How?

Taking charge of your health means looking at your needs.

Prioritize the topics you need to review

Identify, with the help of your resource person, the subjects on which you need additional information to better manage your COPD. In the following table, check off each subject that interests you or is important for you at this time.

| Subject | Pages | Date |
|--|-------|------|
| ☐ What is COPD and how did I develop this disease | 7-11 | |
| ☐ How to recognize and manage the factors that worsen my respiratory symptoms | 12-15 | |
| ☐ How do my medications work on my COPD | 16-22 | |
| ☐ I want to ensure that I take my medications correctly | 23-28 | |
| ☐ How to manage my breathlessness in different situations | 31-39 | |
| ☐ Coughing and secretions bother me. What can I do? | 40-41 | |
| ☐ How can I conserve my energy to control my shortness of breath | 42 | |
| ☐ I would like to better manage my stress and anxiety | 45-51 | |
| ☐ I want help in living in a smoke free environment | 53-55 | |
| ☐ I want to comply with my prescription, without forgetting | 56 | |
| ☐ How to eat in a healthy and balanced way | 57-60 | |
| ☐ Are physical activity and exercise good for me? | 61 | |
| ☐ I have sleep problems | 62 | |
| ☐ I would like to improve my sexual life | 63 | |
| ☐ What is a "Plan of Action" for COPD | 66-69 | |
| Are there ways to better manage a worsening of my respiratory symptoms? Who can help me? | 70-78 | |
| ☐ I would like to follow-up on the attainment of my self- management objectives | 81-82 | |

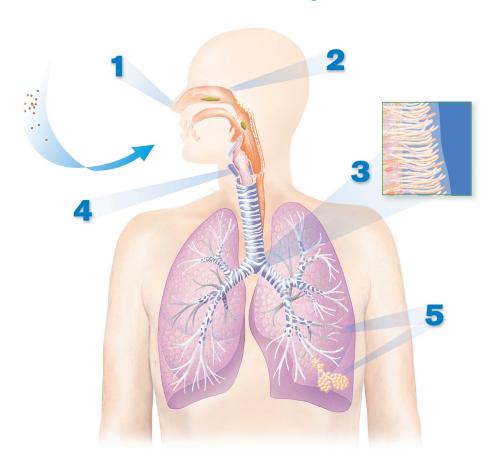
You can also indicate the date when you discussed each subject with your resource person. In this way, during following visits, you can go back to some questions, or choose new subjects.

Remember:

You are in the process of integrating new strategies and knowledge into your life that will help you to live a healthy life with COPD.

Our airways have an efficient self-cleaning system

Normal lung



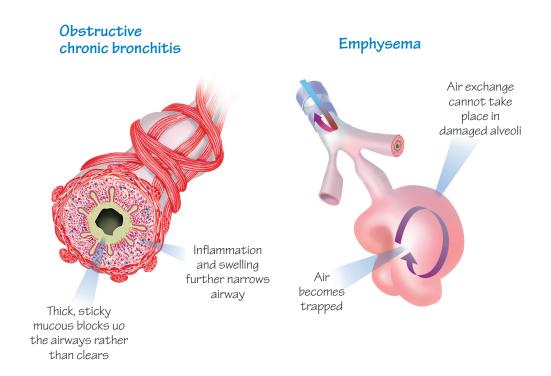
- 1. Every time you breathe, air is drawn into your lungs along with dust and pollutants.
- 2. Many of these particles are trapped inside your nose and other smaller particles stick on tiny mucous layers in your airways.
- 3. Mucous secretions move up to your **trachea** by tiny hairs called **cilia** and then move further up to your throat.
- 4. Once in your throat, mucous is then swallowed or removed by coughing.
- 5. This process prevents particles from reaching the lower airways and doing damage to your **bronchi** and **alveoli**.

COPD: Obstructive Chronic Bronchitis and/or Emphysema

Obstructive chronic bronchitis and emphysema are major breathing diseases that cause airways to become "obstructed" or blocked.

They often occur together but they can also occur separately.

They are also known as COPD (Chronic Obstructive Pulmonary Disease).



COPD: its signs and symptoms

How smoking – and other pollutants – can damage your airways self-cleaning mechanism.

When your airways are constantly attacked by pollutants, such as those found in cigarette smoke, they become inflamed, red and swollen.

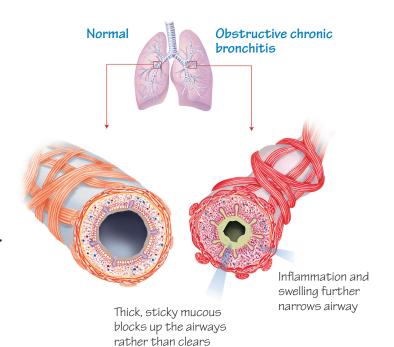
Your bronchi become filled with thick, sticky mucous. You cough to clear your airways. Later, your bronchi may become obstructed (or there is limited airflow). Because of airway obstruction, your lungs do not fully empty and air is trapped.

You have obstructive chronic bronchitis.

What are the signs and symptoms of <u>obstructive</u> chronic bronchitis?

- ✓ Sputum every day
- ✓ Frequent coughing
- ✓ Wheezing
- ✓ Shortness of breath when exercising or during daily activities

Your spirometry test confirms that you have an airflow obstruction.

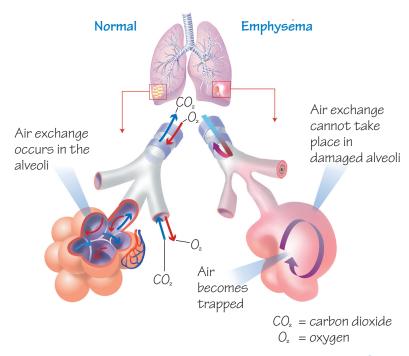


COPD: its signs and symptoms

How smoking and other pollutants may damage your alveoli

Your bronchial tubes branch into smaller and smaller tubes, which end in millions of tiny air sacs called alveoli. The exchange of oxygen and carbon dioxide takes place in the alveoli. When your alveoli are damaged or destroyed, there is a loss of lung elasticity, it becomes difficult for the lungs to exchange oxygen and carbon dioxide and less oxygen gets into your body. Your lungs do not fully empty and air is trapped.

You have emphysema.



What are the signs and symptoms of emphysema?

✓ Shortness of breath when exercising or during daily activities

Your spirometry test confirms that you have an airflow obstruction.

Main cause of COPD

Can you name the primary pollutant that can damage your lungs?

Cigarette smoke is the primary pollutant and the leading cause of COPD.

Many people who suffer from COPD are current or former smokers. Only a minority are suffering from deficiencies such as alpha1-antitrypsin, an inherited lung disorder that may cause emphysema.

Test your knowledge about the effects of cigarette smoke

| Cigarettes contain over 7,000 chemicals. Most of them are poisonous and can |
|---|
| cause respiratory disease and/or cancer. |
| True False |
| The self-cleaning mechanism of your airways is less efficient if you smoke or you are exposed to cigarette smoke. |
| True False |
| Second-hand smoke is not harmful for non-smokers. |
| True False |
| It is never too late to quit. Quitting can help slow down the progression of COPD. |
| TrueFalse |

If you think that you need help to quit smoking, see your doctor or a healthcare professional who can prescribe medications to help you quit smoking and support you on your path to stop smoking. You might also want to join an anti-smoking program in your region. Please consult pages 53-55 of this module.

Factors that can make COPD symptoms worse

When you have COPD, some factors can cause an aggravation of your symptoms. When this symptoms' worsening is sustained, this is called a COPD exacerbation, also known as "flare-up" or "lung-attack". You will learn how to manage a COPD exacerbation in the section "Developing and integrating a plan of action into your life".

Most common factors that can make your symptoms worse:



Indoor pollutants

✓ cigarette smoke, household cleaning products, strong odours, dust



Outdoor pollutants

✓ exhaust fumes, gas fumes, smog



Emotions

✓ anger, anxiety, stress



Changes in temperature

✓ extreme heat or cold, wind, humidity



Respiratory infections

✓ cold, flu, bronchitis, pneumonia

How to avoid factors that worsen COPD symptoms

Now let us look at some of the actions you can take to reduce or avoid your exposure to those factors that make your respiratory symptoms worse

| Factors that may make your respiratory symptoms worse | What you can do to reduce or avoid exposure to these factors |
|---|--|
| Indoor pollutants | |
| Cigarette smoke (including second-hand smoke) | |
| Household cleaning products | |
| Strong odours | |
| Outdoor pollutants | |
| Exhaust fumes | |
| Gas fumes | |
| Smog | |
| Emotions | |
| Anger | |
| Anxiety | |
| Stress | |
| Changes in temperature | |
| Extreme heat or cold | |
| Wind | |
| Humidity | |
| Respiratory infections | |
| Cold/Flu | |
| Bronchitis | |
| Pneumonia | |
| Other factors | |

If you think that you need help to quit smoking, see your doctor or a healthcare professional who can prescribe medications to help you quit smoking and support you on your path to stop smoking. You might also want to join an anti-smoking program in your region. Please consult pages 53-55 of this module.

Other suggestions to reduce or avoid exposure to those factors

Indoor and Outdoor Pollutants

- Quit smoking and avoid second-hand smoke. Discuss with your physician and/or resource person about the strategies that can help you and your close ones to quit smoking.
- Avoid strong odours. Work in well-ventilated areas.
- **Avoid smog.** If the air quality is not good, then try to stay indoors.
- Avoid exhaust and gas fumes.

Emotions

- If you are stressed and anxious, talk to your friends and family about your feelings.
- Practice breathing and relaxation techniques.

Changes in Temperature

- A) When it is **cold**, dress warmly and cover your nose with a scarf.
- B) When it is **hot**:
 - Stay in an air-conditioned environment.
 - Drink plenty of water (if there are no medical restrictions).
 - Avoid strenuous activities.
 - Wear light clothing, preferably in light colours, and a hat.









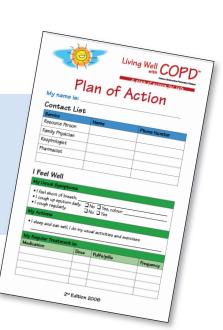
Other suggestions to reduce or avoid exposure to those factors

Respiratory Infections

- Avoid people who have a respiratory infection such as a cold or the flu. Wash your hands if you are in contact with them.
- You and the people you are living with should get a flu shot every fall. Ask your resource person or doctor about a pneumonia vaccine.



Discuss with your physician or resource person about the use of an action plan to better prevent and manage your respiratory symptoms earlier.



Medications for COPD and the importance of taking them properly

Avoiding or reducing exposure to things that make your respiratory symptoms worse is just one part of managing your COPD. Another very important part is to take your medication as prescribed and using the proper technique.

Medications do not cure COPD – but they can help relieve your respiratory symptoms so you will feel better and have an improved quality of life.

You should know the following about your medication:

- the name of each medication you are taking
- what your medication does
- the dose you should be taking
- when you should be taking your medication
- how to take your medication properly
- medication precautions and side effects



Medications for COPD and the importance of taking them properly

| Can you list the medications you are currently taking for your respiratory condition? | | | | | | |
|--|------|-------|--|--|--|--|
| Can you list other medications you are taki | ng? | | | | | |
| Test your knowledge of medications | | | | | | |
| Why are medications for COPD important? | | | | | | |
| • They reduce shortness of breath | true | false | | | | |
| They reduce secretions | true | false | | | | |
| They reduce cough | true | false | | | | |
| Why are most medications inhaled? | | | | | | |
| They act directly in the lungs | true | false | | | | |
| They work faster than orally administered medications | true | false | | | | |
| They cause fewer side effects than orally administered medications | true | false | | | | |

Medications to treat COPD

It may take more than one medication to keep airways open. In COPD, bronchodilators are the main form of medication used on a day-to-day basis. However, there are other types of medications that may be required to help reduce respiratory symptoms.

Here are the following categories of medications that will be introduced and discussed in greater detail:

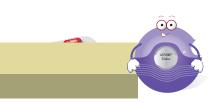
- A. Bronchodilators the most important medications in COPD therapy because they help to open up the airways and reduce shortness of breath on exertion
- **B.** Anti-inflammatories help to treat swelling in the airways and may help to prevent flare-ups (aggravation of respiratory symptoms). In COPD, inhaled anti-inflammatories need to be prescribed in combination with a bronchodilator
- C. Antibiotics help to take care of infections and may be used with COPD medication during an exacerbation











Bronchodilators

Bronchodilators are the most important medications to relieve your symptoms. They open up the airways, prevent and relieve shortness of breath. Certain ones are absolutely essential during an attack.

Short-Acting Anticholinergics

- Prevent bronchi from narrowing
- Usually taken regularly, four times a day

Long-Acting Anticholinergics

- Indicated for maintenance treatment of COPD to reduce disability, reduce exacerbation and improve quality of life
- Prevent bronchi from narrowing
- Taken regularly, one capsule inhaled daily



Bronchodilators

Short-Acting Beta₂-Agonists

- Rescue medication
- Open up airways immediately
- Can also be taken regularly

Long-Acting Beta₂-Agonists

- Indicated for maintenance treatment of COPD to reduce disability, reduce exacerbation and improve quality of life
- Prevent bronchi from narrowing
- Usually taken regularly two times a day
- Should not be used to replace "rescue" medications





Anti-inflammatories

Inhaled Anti-Inflammatories

- Reduce inflammation and swelling in your airways
- Mainly helpful for COPD patients with frequent exacerbations
- Do not provide quick relief of respiratory symptoms
- In COPD, inhaled anti-inflammatories need to be prescribed in combination with a bronchodilator



Combination Long-Acting Beta₂-Agonists and Inhaled Anti-Inflammatories

- Combination effect:
 - o Reduce inflammation and swelling
 - o Open up airways
- Helpful for COPD patients with frequent exacerbations
- Can also be helpful for some patients to further relieve respiratory symptoms
- Do not provide quick relief of symptoms



Medications to treat exacerbations

Oral Anti-Inflammatory (Prednisone)

- Usually prescribed for short periods (1-2 weeks) when your respiratory symptoms get worse (exacerbations)
- Rarely prescribed on a permanent basis
- Can relieve symptoms such as shortness of breath, cough and secretions

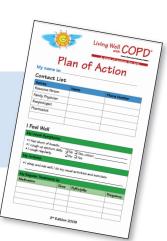


Antibiotics

- Are useful in treating respiratory infections (sinusitis, infected bronchitis, pneumonia, etc.)
- Come in a variety of types
- The treatment has to be taken exactly as prescribed



These medications can be part of your Plan of Action to be used in the event of an exacerbation.

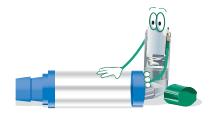


Inhalation devices

The devices that deliver your inhaled medications are classified in two categories:

1. The metered-dose inhaler (MDI) and the spacing device

With an **MDI** (also called inhaler or puffer), the medication is dispensed by pressing down on the canister, which releases a spray of medication at a set dose.



When using an **MDI** you need to coordinate your inhalation with the activation of the inhaler. The use of a **spacing device** is highly recommended since it:

- increases the amount of medication reaching your lungs, and
- diminishes the amount of medication remaining in your mouth and throat, which reduces some of the drug side effects (bitter taste, hoarseness and thrush).

2. The dry powder inhalers

These devices deliver medication in a powder format. The medication is delivered in your lungs when you inhale.

Note: Several types of inhalation devices are available, but not all medications are available in each device.



Each type of inhaler will be described in more detail in the pages ahead.

Important:

Learning the right inhaler technique can be difficult, but you must persist. If you use any of these inhalers incorrectly, the medicine may not get into your airways as it is supposed to, and the therapy might fail. Handling these devices should become a second nature to you, like a reflex.

Inhalation technique: Metered-dose inhaler

TECHNIQUE

- 1. Remove the cap.
- 2. Shake the device 3-4 times from top-down (to mix the contents well).
- 3. Tilt your head slightly back and exhale normally.
- 4. Place carefully the mouthpiece within your teeth and seal your lips around it.
- **5.** Begin to breathe in slowly through your mouth. Press down once on the canister and continue breathing in slowly (only once to release one dose of medication).
- 6. Continue to breathe in slowly and deeply until your lungs are full.
- **7.** Hold your breath for 4 to 10 seconds, so the medication will have time to settle in your airways.
- **8.** If another dose is required, wait one minute between puffs and repeat steps 2-7.
- 9. Replace the protective cap.

Step 2

Step 4



- Once a week, clean the cap and plastic container, without the canister, by soaking them in warm, soapy water, then rinsing and allowing to air-dry.
- The canister should be kept warm, away from heat sources and cold. In case of exposure to cold, roll the canister between the palms of your hands to warm it up.

Inhalation technique: Metered-dose inhaler with a spacing device

TECHNIQUE

- 1. Remove the caps
- 2. Shake the inhaler 3-4 times and connect it to the spacing device, keeping the inhaler upright.
- 3. Tilt your head slightly back and breathe out normally.
- **4.** Place the spacing device mouthpiece carefully between your teeth and seal your lips around it.
- 5. Press down canister once.
- 6. Breathe in slowly and deeply through your mouth.
- **7.** a. Single breath technique: Try to hold your breath for 4 to 10 seconds. Then exhale normally.
 - b. **Tidal volume technique:** If you find it difficult to take one deep breath or to hold your breath for long, breathe slowly in and out of the spacing device, 3-4 times in a row.
- 8. If you need more than one dose, wait 1 min. between puffs and repeat steps 2-7.
- 9. Replace the protective caps.

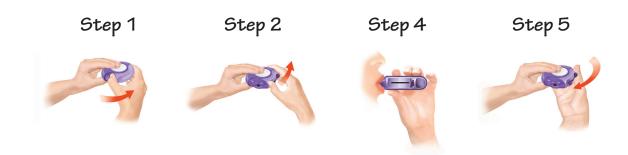


- Clean the spacer device prior to the first use and once a week thereafter, as per the manufacturer's instructions, to avoid build up of medication residue or propulsion agent on the walls.
- If your spacer device is well-maintained, it can last for one or two years, depending on the type. The device should be replaced earlier if damaged.
- Keep the spacer device in a secure place to ensure that no foreign objects will fall into the chamber.

Inhalation technique: Diskus®

TECHNIQUE

- 1. Hold the outer case in one hand and put the thumb of the other hand on the thumb grip. Push the thumb away as far as it will go until a click is heard.
- 2. Slide the lever away as far as it will go until a click is heard.
- 3. Hold the Diskus® away from the mouth and breathe out completely.
- **4.** Place the mouthpiece carefully between your teeth, seal your lips around it and breathe in quickly and deeply through the Diskus[®]. Remove the device, hold your breath for about 4-10 seconds, then breathe out slowly.
- **5.** Close your Diskus® by sliding the thumb grip back as far as it will go until a click is heard.
- 6. If you need more than one dose, repeat steps 1 to 5.



- To clean, wipe the mouthpiece with a clean, dry cloth.
- Never immerse the inhaler in water. This medication is a dry powder that could clump.
- Always keep the device closed to keep your device clean.
- Store the device at room temperature in a dry place.

Inhalation technique: HandiHaler®

TECHNIQUE

- 1. Open the dust cap by pulling it upwards.
- 2. Open the mouthpiece.
- **3.** Remove a Spiriva® capsule from the blister (only immediately before use) and place it in the centre chamber.
- 4. Close the mouthpiece firmly until you hear a click.
- **5.** Hold the HandiHaler® with the mouthpiece upwards and press the green button completely in once, and release.
- 6. Hold the HandiHaler® far away from your mouth and breathe out normally.
- 7. Place the mouthpiece carefully between your teeth and seal your lips around it. Breathe in slowly and deeply to hear the capsule vibrate.
- 8. Remove the HandiHaler® while holding your breath for 4 to 10 seconds, then breathe out normally.
- 9. You can breathe in again to ensure that you have taken all the medication (steps 7-8).
- **10.** Open the mouthpiece again. Tip out the used capsule and dispose (avoid touching the capsule; if you do, do not touch your eyes and be sure to wash your hands properly.)
- 11. Close the mouthpiece and dust cap for storage.



- The HandiHaler® must be cleaned at least once a month, or as needed.
- Open the dust cap and the mouthpiece, and push up the green button up in order to open the base.
- Rinse the HandiHaler® with warm water in order to remove residual powder.
- Do not clean with soap and never put in the dishwasher.
- Allow the HandiHaler® to air-dry completely.

Inhalation technique: Turbuhaler®

TECHNIQUE

- 1. Unscrew plastic cover.
- 2. Hold the Turbuhaler® upright.
- **3.** To load the device with a dose turn the coloured grip as far as it will go in one direction, and then turn it back again as far as it will go in the opposite direction. You will hear a click sometime during these steps.
- 4. Hold the Turbuhaler® far away from your mouth and breathe out normally.
- **5.** Place the mouthpiece carefully between your teeth and seal your lips around it. Breathe in deeply and forcefully through the Turbuhaler[®].
- **6.** Remove the Turbuhaler® from your mouth and hold your breath for 4-10 seconds.
- 7. If another dose is required, repeat steps 2 to 6.
- 8. Put the protective cap back on.



- To clean, wipe the mouthpiece with a clean, dry cloth.
- Always keep the device closed to keep it clean and protect it against humidity. This medication is a dry powder that could clump.
- Never immerse the inhaler in water.
- Store the device at room temperature in a dry place.

Check your confidence level in preventing and managing your respiratory symptoms

On a scale of 1 to 10, circle the number that best represents the confidence that you have in your ability to apply the strategies and techniques taught in this section.

| VIII | 3 300010 | 11. | | | | | | | | |
|--|-----------------------|------------------------|----------|---|---|-------------------------|-----|----------|-----------------|-------------------|
| 1. To identify the factors that can make your respiratory symptoms worse? | | | | | | | | | | |
| | 1 not at al | 2 I confiden | 3 | 4 | 5 | 6 | 7 | 8 | 9 very confi | 10 dent |
| 2. To avoid or at least reduce your exposure to the factors that can make your respiratory symptoms worse? | | | | | | | ory | | | |
| | 1 not at al | 2 I confiden | 3 | 4 | 5 | 6 | 7 | 8 | 9 very confi | 10 dent |
| | | | | | • | dose, righ y symptor | | and usin | g the prop | er |
| | 1 not at al | 2 I confiden | 3 | 4 | 5 | 6 | 7 | 8 | 9 very confi | 10 dent |
| 4. Do you think your medication is helping you to prevent and manage your respiratory symptoms? | | | | | | | | | | |
| | 1 not at al | 2 I confiden | 3 | 4 | 5 | 6 | 7 | 8 | 9 very confi | 10 dent |
| | | | | | | | | | | |

Check your confidence level in preventing and managing your respiratory symptoms

If you feel confident that you can prevent and manage your respiratory symptoms, continue to apply the strategies suggested in this section.

If you don't feel confident that you can prevent or manage your respiratory symptoms, what are the reasons?

What could you do to feel more comfortable using the strategies and techniques taught in this section?

Don't hesitate to discuss your concerns about your medications and how they should be properly taken with your doctor or your resource person.

Shortness of breath in COPD

When you have COPD, the simple act of breathing can become an effort. Not being able to breathe easily can affect every part of your life. It can affect your body by making you tire out quickly. It can also affect your emotions by making you feel tense and anxious.

Why do you feel short of breath when you have COPD?

When you have COPD, air remains trapped inside your lungs.

Air trapped in the lungs

Due to an obstruction in the air passage and a loss of elasticity of the lungs, your lungs do not completely empty and the air remains trapped.

Breathing becomes more difficult

Due to the fact that air remains trapped in your lungs, your diaphragm must work harder and its movement is less efficient. Furthermore, you must have use of your accessory muscles in the neck, sides and chest to breathe.

You feel short of breath

Since you have air trapped in your lungs, you have difficulty bringing in fresh air and you feel short of breath.

Living better with COPD means alleviating your symptoms by taking your medications but also by controlling your breathing.

If you reduce the air trapped in your lungs, you will allow fresh air to enter more easily, consequently you will be less short of breath.

Pursed-lip breathing

Pursed-lip breathing is one technique that can help you feel less short of breath.

Have you heard about the pursed-lip breathing technique? If so, are you using it? How and when?

Goal:

• With this technique, you breathe out slowly, which allows you to exhale more air, thus leaving less air trapped inside your lungs.

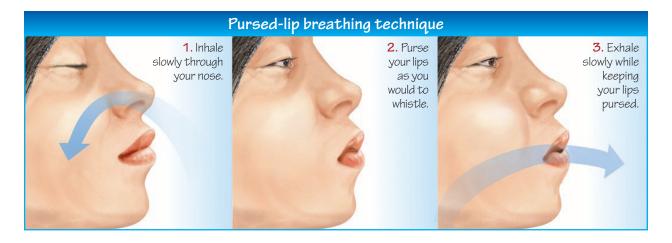
Benefits:

- 1. Reduces breathing frequency and shortness of breath
- 2. Helps you return to your normal breathing pattern after exercise
- 3. Improves your ability to perform different activities
- 4. Increases your sense of control over your own breathing

Points to remember:

- The focus should be on expiration.
- Expiration should be made longer, but not forced.
- First master this breathing technique while at rest. Then you will be able to use it with activities requiring effort.

Pursed-lip breathing



Steps

- 1. Inhale slowly through your nose until you feel that your lungs are filled with air.
- 2. Purse your lips as you would if you were whistling or about to kiss someone.
- **3.** Exhale slowly while keeping your lips pursed. Make sure to take longer to breathe out than you would to breathe in. Remember to keep your lips pursed.
- 4. Do not force your lungs to empty.

Pursed-lip breathing technique - on exertion

Learning how to inhale through your nose and slowly exhale through your lips can help to reduce shortness of breath when you are doing a physical activity. It can also keep anxiety from turning into panic if you experience an acute attack of shortness of breath. You can apply pursed-lip breathing to various physical activities:

Walking

- Inhale 1...2...
- Exhale 1...2...3...4

Suggestions

- Make sure the outdoor temperature is not too hot or cold.
- Wear comfortable shoes and clothing.
- Relax your muscles.
- Walk as fast and as far as you can while respecting your own limits.
- Do not hold your breath.
- Stop as often as you need to.

Climbing stairs

If you suffer from severe shortness of breath:

- Inhale at rest.
- Climb one step while exhaling, and stop for inhaling. Repeat for each step.

If you are able to climb some steps:

- Inhale at rest.
- Climb 3-4 steps while exhaling, stop for inhaling.

Pursed-lip breathing technique - during effort

If you are able to climb at least a flight of stairs:

- Inhale at rest.
- Climb 3-4 steps while exhaling.
- Climb 2 steps while inhaling.
- Climb 3-4 steps while exhaling, etc.

Suggestions

- Wear slip-resistant shoes.
- Keep stairs free of obstacles.
- Keep one hand over the railing for security.
- Do not pull the railing to climb.
- Climb slowly.
- Stop as needed.
- Do not force your exhalation.
- Respect your own limits.

Carrying parcels

- Before lifting a heavy object, inhale through the nose.
- Bend down and pick up the object while exhaling through pursed lips.
- Use pursed-lip breathing while carrying the object. Repeat the process when putting the object down.
- Always bend at the knees, keeping your back straight.

Applying pursed-lip breathing technique may seem to take too much time. However, you will actually end up saving time, since you will take fewer breaks because you will be less short of breath.



Body positions to reduce shortness of breath

Poor posture – with shoulders tensed or hunched over – can also lead to increased shortness of breath, because your chest cannot expand to its full capacity. Changing your body position while sitting or standing can help you breathe better.

Goal:

• To offer relief to accessory muscles and improve diaphragm function.

Benefits:

- 1. Help the diaphragm to move easier
- 2. Help reduce shortness of breath

Points to remember:

- Use pursed-lip breathing with the different body positions.
- Lean your chest forward slightly. This will lessen pressure against your diaphragm, allowing it to relax more.

Positions to reduce shortness of breath

Sitting

Sitting position A

- Place both feet on the ground
- Lean your chest forward slightly
- Rest your elbows on your knees
- Rest your chin on your hands

Sitting position B

- Place both feet on the ground
- Lean your chest forward slightly
- Rest your arms on a table
- Rest your head on a pillow

Standing

Standing position A

- Lean your chest forward slightly
- Rest your hands on your thighs

Standing position B

- Rest your elbows on a piece of furniture
- Rest your head on your forearms
- Relax your neck and shoulders

Standing position C

- Rest your hands on a piece of furniture
- Avoid "grabbing the table" while using these positions. This can overwork some of your accessory breathing muscles, and cause breathlessness if you hold the position too long.











S.O.S. in an attack of shortness of breath

Experiencing an acute attack of shortness of breath can be frightening for people with COPD. Learning to stay calm during an attack can get your breathing – and anxiety – back under control.

| What do you do when you | experience an | acute attack | of |
|-------------------------|---------------|--------------|----|
| shortness of breath? | • | | |

Goal:

• To bring your breathing back to normal during an acute attack of shortness of breath.

Benefits:

- 1. Learn how to control shortness of breath
- 2. Help reduce the panic associated with an attack

Point to remember:

• Give yourself the space and time to get your breathing back to normal.

S.O.S. in an attack of shortness of breath

Steps:

- 1. Stop and find a comfortable position.
- 2. Stay as calm as possible; relax your shoulders.
- **3.** Introduce the pursed-lip breathing technique: inhale through your mouth if you cannot through your nose; purse your lips to exhale.
- **4.** Slow down your breathing by taking more time to breathe out than you would to breathe in. Do not force your lungs to empty.
- **5.** Continue to exhale slowly while keeping your lips pursed; start to inhale through your nose if you have not been able to do it so far.
- 6. Continue to pursed-lip breathe for at least 5 minutes.

How do you think your friends and family could help you when you are experiencing an attack of shortness of breath?

Consider how they could help you.

Coughing and sputum are two other symptoms of COPD...

But did you know that some coughing techniques could help to better clear your lungs?

When you have COPD, your airways can be blocked with thick, sticky mucous or sputum. Not only does this make it harder for you to breathe, it also provides a breeding ground for infections.

Coughing, therefore, is important, because it helps to remove sputum from your lungs.

A regular, hacking cough, however, will not do the job.

There is a proper way of coughing, just as there is a proper way of breathing.

Do you know how to cough properly?

How can learning to cough properly help you breathe better and save your energy?



Controlled cough technique

Goal:

• To remove sputum from your lungs while using less effort.

Benefits:

- 1. Prevents infections caused by increased sputum in your lungs
- 2. Reduces shortness of breath caused by sputum blocking your airways

Points to remember

- Avoid coughing in small fits.
- It is important to save energy.

Steps

- 1. Seat yourself in a comfortable position.
- 2. Tilt your head slightly forward.
- **3.** Place both feet firmly on the ground.
- 4. Inhale deeply through your nose.
- 5. Cough twice while keeping your mouth slightly open. The first cough will loosen your sputum. The second cough will move the sputum up into your throat. Spit the sputum out into a white tissue. Check the colour of your sputum. If there is a change in your sputum colour, follow your doctor's recommendations. If there is blood in your sputum, talk to your doctor.
- 6. Take a break and repeat once or twice if there are no immediate results.

Energy conservation principles

Staying active and keeping up your routine is important when you have COPD. Learning how to manage your breathing when performing your day-to-day activities will help you save energy and prevent fatigue

Goal:

• To better perform the daily activities that cause fatigue and shortness of breath.

Benefits:

- 1. Minimize fatigue and shortness of breath.
- 2. Better perform daily activities according to your level of energy.

The 6 principles

- 1. Prioritize your activities
- 2. Plan your schedule within your limits
- 3. Pace yourself
- 4. Position your body and arrange your environment to reduce shortness of breath
- 5. Use Pursed-lip breathing when doing activities requiring effort
- 6. Keep a Positive attitude

Check your confidence level in managing your breathing

On a scale of 1 to 10, circle the number that best represents the confidence that you have in your ability to apply the techniques taught in this section.

| 1. To us | se your pu | rsed-lip bre | athing tec | hnique? | | | | | |
|----------|------------------------|------------------------------|------------|-----------|-------------|-----------|----------|--------------|--------------------|
| 1 | 2 at all cor | _ | 4 | 5 | 6 | 7 | 8 | 9 very co | 10 onfident |
| 2. То ар | ply body | positions to | reduce sl | ortness | of breath | ? | | | |
| 1 not | 2 at all cor | _ | 4 | 5 | 6 | 7 | 8 | 9 very co | 10 onfident |
| 3. To m | anage you | r breathing | during an | attack of | shortnes | s of brea | th? | | |
| 1 | 2 at all cor | | 4 | 5 | 6 | 7 | 8 | 9 very co | 10 onfident |
| - | | he breathing s of breath? | | es taught | t in this m | odule can | help you | to better | · manage |
| 1 | 2 at all cor | 3 nfident | 4 | 5 | 6 | 7 | 8 | 9 very co | 10 onfident |

Check your confidence level in managing your breathing

If you feel confident in managing your breathing, continue to apply the techniques taught to your daily life.

If you do not feel confident managing your breathing, what are the reasons?

What could you do to feel more comfortable using the techniques taught in this section?

Identify the stressors in your life

Stress is a part of life – and even more so when you are living with a chronic illness like COPD. Living Well with COPD means knowing how to control your reactions to stressful situations in your life, maintaining a positive attitude and learning to relax.

Stressors are events or situations in everyday life that require change.

Here are some examples of common stressors faced by people with COPD that force them to make changes in their life.

Personal:

- Personal illness/handicap
- Change in self-esteem
- Change in financial status
- Change in habits (sleep, nutrition, exercise, smoking)

Work, daily activities and environment:

- Change in ability to perform activities of daily living
- Loss of job, disability leave, retirement
- Moving to a new dwelling

Family and social network:

- Separation/divorce
- Illness or death of spouse, family member or close friend
- Conflicts with family members or friends

Stress refers to the physical and psychological reactions that a person experiences when faced with **stressors**.

Stress reactions

You can react in different ways when facing stressful situations (stressors). Your reaction will have an impact over the way you will cope with them.

Fear is a normal reaction to a present danger.

Symptoms: increased heart rate, shallow, rapid breathing (which is similar to the shortness of breath of COPD), sweating and muscle tension.

Anxiety is a reaction that involves constantly worrying and anticipating stressful situations.

Symptoms: The symptoms are similar to those of fear.

Panic attack is an exaggerated, irrational and often sudden fear or anxiety reaction.

Learning to manage your stress allows you to function at a higher level and to feel more satisfied with life despite the problems that you may be facing.

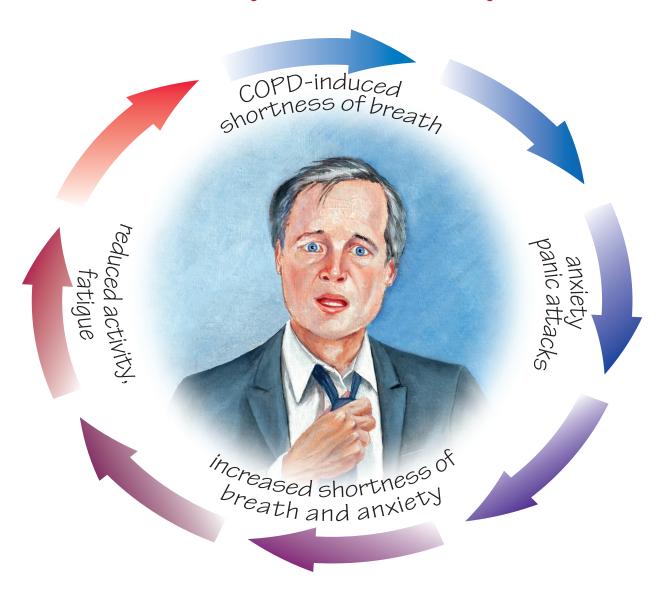
Understanding your anxiety response

| What is the most important stressful situation that dealing with these days? Are you anxious about this s | |
|---|---------------|
| Do you have negative thoughts about this situation? I what are they? | f <i>so</i> , |
| How does your body react when you are anxious? Desc your symptoms. | ribe |
| What do you do when you are anxious? | |
| Can you think of other actions that would help you to loope with this situation in the future? | better |
| | |

Knowing what to do and planning ahead in potentially stressful situations will help

you to reduce your anxiety level.

The anxiety-breathlessness cycle



The anxiety-breathlessness cycle

- The main symptom of COPD is shortness of breath.
- Shortness of breath can cause anxiety and even panic attacks.
- Anxiety makes you breathe faster, which increases your shortness of breath and as a result, you become more anxious.
- Many COPD sufferers choose to reduce their activities because of their fear of dying from breathlessness.
- The less you do, the less you are in shape. You will experience more fatigue, shortness of breath and anxiety.

Managing your anxiety is also very important in preventing and reducing shortness of breath.

How to break the anxiety-breathlessness cycle

- Recognize your fears. Understanding what makes you anxious is the first step to controlling your reaction. Do not be too hard on yourself. Do not think yourself weak for being afraid.
- Examine and investigate your fears. Some of the beliefs that you grew up with may be causing your fears. Ask yourself: Are they based on things that have happened or on things that you fear may happen?
- **Plan your actions in advance.** You will be less anxious, knowing that you are prepared to deal with stressful situations.
- Do things you enjoy. Reserve room for pleasurable activities in your day.
- Try to solve one problem at a time. Trying to make too many changes at once will only make you anxious.
- Let yourself make mistakes. For most problems, there are a number of possible solutions. If you do not succeed at one thing, try again, taking a different approach if needed.
- Maintain a positive attitude. Your mental health will improve along with your problem-solving ability. Try to concentrate on what is positive in your life.
- **Use humour.** You can help reduce your stress and create a positive atmosphere.
- Learn to relax. You can use the relaxation techniques that you will be learning in the following pages.
- If you feel uneasy, ask questions and find answers. Do not hesitate to talk to the people close to you about your feelings and your condition. Do not hesitate to consult a healthcare professional if needed.

Relaxation technique

Goal:

• Relax your body and quiet your mind.

Benefits:

- 1. Allows you to be in better control of your emotions
- 2. Slows your breathing and reduces muscular tension

Deep breathing (diaphragmatic breathing)

You will be more relaxed if you close your eyes and think about a quiet place or the word "calm".

- 1. Put one hand on your abdomen.
- 2. Breathe in deeply.
- **3.** Feel your abdomen inflate. Push your abdomen out as much as possible when you are inhaling. This will help your lungs fill up with air.
- **4.** Exhale through your mouth while keeping your lips pursed (as if you were about to whistle).
- **5.** Feel your abdomen returning to its normal position.
- 6. Wait after each exhalation until you are ready to take another deep breath.
- **7.** After a few times, you will find your own rhythm. For example: one deep breath for 5 normal breaths.

If you start feeling dizzy, take a few normal breaths before starting again.

Points to remember:

- Take your time. Practice is the key to success.
- There are other relaxation techniques, such as visualization, don't hesitate to speak to your resource person about them.

Check your confidence level in managing your stress and anxiety

On a scale of 1 to 10, circle the number that best represents the confidence that you have in your ability to apply the strategies and techniques taught in this module.

1. To identify stressors in your life? 8 4 5 6 7 10 not at all confident very confident 2. To control your reactions when facing stressful situations? 8 6 10 not at all confident very confident 3. To use the deep breathing technique? 6 8 5 not at all confident very confident

4. Do you think that the strategies and techniques taught in this section can help you to better manage your stress and anxiety?

1 2 3 4 5 6 7 8 9 10 not at all confident very confident

If you feel confident in managing your stress and anxiety, continue to apply the techniques taught in this module to your daily life.

If you do not feel confident managing your stress and anxiety, what are the reasons?

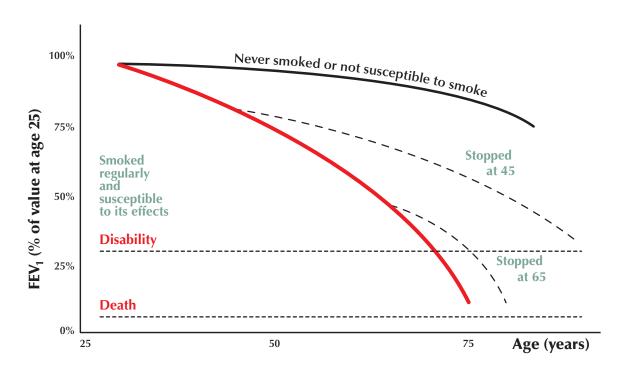
What could you do to feel more comfortable using the techniques taught in this section?

Maintaining a healthy lifestyle

Adopting and maintaining a healthy and fulfilling lifestyle requires you to acquire good habits, ranging from a smoke free environment and a healthy diet to regular physical activity.

Quitting Smoking

The single most important thing you can do to slow down the progression of COPD is to quit smoking.



How do you think quitting smoking will affect your health?

Quitting Smoking

Goal:

• To stop smoking.

Benefits:

- 1. Reduces cough and sputum
- 2. May improve breathing, but most importantly it slows down the decline of the lung function
- 3. Reduces the frequency and severity of respiratory infections
- 4. Reduces the risk of heart attack and cancer

Smoking is an addiction that often takes many years to control. Be patient with yourself. There are many ways to improve your chances of success in quitting smoking.

Here are some suggestions:

Medications

- Using some medications could double your chances of success.
- Products that can help you stop smoking include:
 - o Nicotine replacement therapy such as patches, gum, lozenges, inhalators and oral spray.
 - o Non-nicotine treatments (tablets) are only available on prescription. These medications work in the brain to help reduce the cravings for cigarettes and withdrawal symptoms.
- Talk to your local smoking cessation specialist, doctor or pharmacist about the most suitable product for you.



Quitting Smoking

Support and counselling

- You can **increase your chances of success up to 3 times** when you combine medication with counselling. There are group programmes or one-on-one sessions. Talk to a health professional, for example, your local smoking cessation specialist, doctor or pharmacist.
- Call the **toll-free quitline in your area.** Quitlines are free hotlines to help people who want to quit or to learn more about quitting.
- You can also call your provincial **Lung Association office**: they can provide you information about helplines, support groups, and other resources in your area.

Other helpful strategies

• Plan in advance

- o Select a good time to stop (ideally, a routine day; avoid special events or days when you are feeling sick).
- o Remove from your environment all smoking related items (ashtrays, lighters).
- o Use a calendar to record your progress.

Manage cravings and withdrawal symptoms

- o Delay: Cravings usually pass in 3-5 minutes.
- o Drink water, try sugar-free chewing gum (e.g. with nicotine), or eat something healthy and non-fattening.
- o Distract: For example, taking a walk can give you energy and take your mind off cigarettes.
- o Deep breathing can help you to relax and make cravings go away.

• Deal with relapses

- o Don't be too hard on yourself. In average, people try to stop between 5-6 times before succeeding. Ask for help.
- o Think about what caused you to relapse and try to avoid this in the future.

Taking medication as prescribed

Goal:

• To open airways in your lungs, reduce respiratory symptoms and prevent complications.

Benefits:

- 1. Relieves shortness of breath
- 2. Increases exercise tolerance
- 3. Prevents exacerbations (flare-ups) and related complications
- 4. Reduces emergency room visits and hospitalizations
- 5. Improves quality of life

Points to remember:

- Medications must be taken as prescribed, using the proper technique.
- Use a reference point during the day that will remind you to take your medications: for example, first thing in the morning after you wake up.
- Stick a reminder on your fridge door.
- Ask your resource person and/or doctor if you have questions regarding your medication and therapy.
- Seek out information, and observe how you feel about the effects of a medication. Take notes.

Taking your medication as prescribed and using the proper technique is one of the most important steps towards maintaining a healthy lifestyle.

A healthy and balanced diet

In order to breathe, your body requires a lot of energy or fuel. In fact, a person with COPD uses more energy on breathing compared to a person who does not have a lung disease! One way to think of eating is to compare it to filling up a car with gas.

The quality of the fuel counts too.

Why do you think it is important to eat a healthy and balanced diet?

Goal:

• To maintain a healthy body weight through a balanced diet.

Benefits:

- Stores energy
- 2. Improves quality of life
- 3. Improves physical capacity
- 4. Prevents infections

Points to remember:

- If you are underweight, you can lack energy: you may need to eat more or increase the energy and protein content of your diet.
- If you are overweight, it is harder for your muscles to work and this can worsen your shortness of breath. A balanced and healthy diet can help you achieve gradual weight loss.



Base your diet on the recommendations in the Canada Food Guide[†]:

| Grain Products | Vegetables and | Milk and | Meat and |
|--------------------------------------|--|-------------------------------|---|
| | Fruits | alternatives | alternatives |
| 6 to 8 servings | 7 to 10 servings | 2 to 3 servings | 2 to 3 servings |
| a day | a day | a day | a day |
| One serving equals: | One serving equals: | One serving equals: | One serving equals: |
| 1 slice of bread | 1 medium-sized fresh vegetable or fruit | 1 cup (250 ml) milk | 50-100 grams of meat, poultry or fish |
| 30 g cold cereal | 1/2 cup (125 ml) canned or frozen vegetable or fruit | 3/4 cup (175 ml) of yogurt | 1/3 - 2/3 can (50 -100g) fish |
| 3/4 cup (175 ml) | 1/2 cup | 50 g of cheese | ½ cup-1cup (125- |
| hot cereal | (125 ml) juice | (3x1x1 in) | 250 ml) beans |
| 1/2 bagel, pita | 1 cup | 2 slices (50 g) | 1/3 cup (100 g) |
| or bun | (250 ml) salad | of cheese | tofu |
| 1/2 cup (125 ml) of pasta or rice | | | 2 tablespoons (30 ml) peanut butter |

 $^{+ \} http://www.hc-sc.gc.ca/fn-an/alt_formats/hpfb-dgpsa/pdf/food-guide-aliment/view_eatwell_vue_bienmang-eng.pdf (2011)$

Here is an example of a typical menu:

| | What do you eat? |
|--|------------------|
| Breakfast | |
| Oatmeal (3/4 cup, 175 ml) | |
| Milk (1 cup, 250 ml) | |
| One banana (medium size) | |
| Snack | |
| Orange juice (1/2 cup, 125 ml) | |
| Raisin bread (one slice) | |
| Lunch | |
| Bean and tomato soup (1/2 cup, 125 ml) | |
| Bread (one slice) | |
| Apple sauce (1/2 cup, 125 ml) | |
| Fresh carrots (1/2 cup) | |
| Snack | |
| Yogurt (3/4 cup, 175 ml) | |
| Dinner | |
| Roast Chicken (50-100g) | |
| Rice (1 cup, 250 ml) | |
| Vegetable medley (1/2 cup, 125 ml) | |
| Canned peaches (1/2 cup, 125 ml) | |
| Snack | |
| One muffin | |

This menu is only an example – it may not meet everyone's energy and protein needs. It provides the minimum daily intake of 6 portions of cereal products, 7 portions of vegetables and fruits, 2 portions of milk products (or alternatives) and 2 portions of meat (or alternatives) as recommended by the Canada Food Guide.

Getting the most out of every meal

What keeps you from eating properly?

| Potential Problems | Suggestions |
|--|--|
| Breathlessness or fatigue while eating | Take your time, try putting your knife and fork down between bites. Cut food into small bite-size pieces and buy tender meats and food which don't require much chewing. Relax before and after meals and sit upright. As needed, use your short-acting bronchodilator (reliever) and your airway clearance techniques before meals. |
| Difficulties when preparing meals | Use fast and easy recipes, and cook more than one meal at a time. Freeze what you do not eat and save it for later. Consider getting help for preparing meals, for example, ask a family member. Services such as "meals on wheels" may be available. |
| Bloating and getting wind | Eat slowly and chew food well. Avoid carbonated drinks and food which encourages bloating, for example legumes (beans, lentils, etc.), cabbage and onions. |
| Feeling full too quickly | Drink fewer liquids during meals. Instead, sip on fluids an hour before meals. Eat smaller meals more often (5-6 meals a day). Eat cold foods, which provide less of a sense of feeling full than hot foods. |
| Constipation | Eat foods that are high in fiber, for example brown rice, bran- or oat-based cereals, whole or multigrain bread. Drink at least 8 glasses of water a day (if you have no restrictions). Exercise regularly according to your ability. |

If your problems persist, consult a health professional.

Exercise and physical activity are some of the most important treatments in COPD

Regular exercise and physical activity is essential for your physical and mental well-being. Even doing a small amount of exercise can help, as long as it is done regularly.

| Are you doing some exercise and | l physical activity on a regular |
|---------------------------------|----------------------------------|
| basis? If yes, what? How often? | |

| If not, wha | t is preventing | you from | exercising? | |
|-------------|-----------------|----------|-------------|--|
|-------------|-----------------|----------|-------------|--|

Goal:

• To remain in shape.

Benefits:

- 1. Reduces shortness of breath
- 2. Increases muscle mass and helps maintain bone mass
- 3. Improves functional abilities and endurance
- 4. Improves mood and reduces the risk of depression
- 5. Improves sleep and quality of life

Points to remember:

- At least 30 minutes of daily physical activity is recommended.
- Aerobic exercise (e.g. walking, swimming, bicycling) and strength training (upper and lower extremities) are two important parts of an exercise program.
- You should also have your fitness level evaluated by your doctor or healthcare worker before starting any exercise program.

The brochure "Get moving... Breathe Easy" will guide on how to increase your level of physical activity.

If you need to start a formal exercise program, talk to your health professional; the module "Integrating an Exercise program into your life" may be recommended for you.



Putting sleep problems to rest

Getting a good night's sleep is very important. You may feel tired over the day when your sleep is interrupted (for example, due to some breathing difficulties or coughing).

Goal:

• To get good, restful sleep.

Benefits:

- 1. Restores daytime energy
- 2. Improves the ability to think clearly
- 3. Reduces anxiety

Suggestions to get a good night's sleep:

- Exercise, eat well and remain active.
- Maintain a routine.
- Relax before going to bed. Do your relaxation techniques, take a soothing bath and listen to music.
- Avoid heavy meals before bedtime. Heavy meals will take time to digest and will increase your shortness of breath.
- Do not drink coffee, tea or sodas before going to bed. Avoid eating chocolate as well. All of these contain stimulants that will make sleeping difficult.
- Keep your bedroom adequately humidified.
- Avoid talking about stressful things or watching upsetting television programs. They can get your thoughts racing and make it hard for you to fall asleep.

Points to remember:

- Everyone has trouble sleeping at one time or another.
- There is no "correct" amount of sleep.
- Every person sleeps for a period of time that is healthy for him or her.

If you are still having trouble sleeping and feel tired during the day, talk to your doctor.



A satisfying sexual life

Sexuality can be a source of relaxation and pleasure. Respiratory problems and fatigue caused by COPD can have a negative impact on some people's sexual life.

Goal:

 To have a healthy and satisfying sexual life to meet my needs and those of my partner.

Benefit:

1. Can lead to a feeling of well-being for you and your partner

Some advice:

- Stay in shape with regular exercise. Physical effort during intercourse is equal to climbing a flight of stairs at a normal pace.
- As with any physical exercise, you can take your short-acting bronchodilator 20 to 30 minutes before having sex.
- Use breathing and relaxation techniques to reduce your shortness of breath.

Points to remember:

- A satisfying sex life is not limited to sexual intercourse. Emotions created by a romantic dinner, soft music and simply touching can also create greater intimacy between you and your partner.
- All you senses are engaged in your sexuality: sight, hearing, scent, taste and touch.

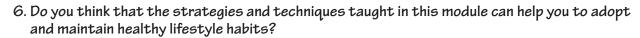
If you have concerns about your sex life, discuss this with your healthcare resource person.

Check your confidence level in adopting and maintaining healthy lifestyle habits

On a scale of 1 to 10, circle the number that best represents the confidence that you have in your ability to apply the strategies and techniques taught in this section to adopt and maintain healthy lifestyle habits.

| 1. To live in | a smoke | free envir | onment? | | | | | | |
|--------------------|------------------------|-----------------|------------|------|---|---|---|--------------|-----------------------|
| 1 not at | 2 all confid | 3 ent | 4 | 5 | 6 | 7 | 8 | 9 very co | 10 Infident |
| 2. To take: | your med | ications a | ıs prescri | bed? | | | | | |
| 1 not at | 2 all confid | 3 ent | 4 | 5 | 6 | 7 | 8 | 9 very co | 10 infident |
| 3. To have a | a healthy | and balar | iced diet | ? | | | | | |
| 1 not at | 2 all confid | 3 ent | 4 | 5 | 6 | 7 | 8 | 9 very co | 10 infident |
| 4. To exerc | ise regula | ırly? | | | | | | | |
| 1 not at | 2 all confid | 3 ent | 4 | 5 | 6 | 7 | 8 | 9 very co | 10 infident |
| 5. To maint | tain good | sleep hab | its? | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 verv co | 10 |

Check your confidence level in adopting and maintaining healthy lifestyle habits





7. Do you think that if you adopt healthy lifestyle habits you will be able to improve your quality of life?

If you feel confident adopting and maintaining your healthy lifestyle habits, continue to apply the techniques taught in this module to your daily life.

If you do not feel confident adopting and maintaining healthy lifestyle habits, what are the reasons?

What could you do to feel more comfortable implementing the strategies taught in this module?

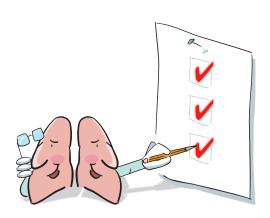
Your Plan of Action

Living well with COPD means being aware of changes in your respiratory symptoms and being prepared to manage them.

Your Plan of Action should hold an important place in your life because it will help you to make decisions related to managing your COPD, particularly when your respiratory symptoms become worse.

Your Plan of Action will help you to:

- Better recognize your everyday respiratory symptoms.
- List what you are doing every day to remain well, including taking your medication as prescribed.
- Recognize a worsening of your respiratory symptoms and the situations that can trigger it.
- Know what to do to prevent a worsening of your respiratory symptoms and start treatment as soon as possible if that happens.
- Know when and whom to call if your symptoms get worse and/or do not improve.

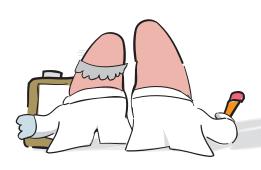


Recognizing your symptoms, identifying when they become worse and why

| What are your everyday respiratory symptoms? |
|--|
| Have your symptoms gotten worse lately? What happened the last time they got worse? What did you do? |
| Look ahead and be prepared. |
| What things can cause your symptoms to get worse? |
| Now, you will learn how to manage your symptoms. |

It is important that you know what to do when your respiratory symptoms get worse.

This is your Plan of Action.



Let's create your contact list

An essential part of your Plan of Action is to have the phone numbers of your contacts close at hand. These are the key people you can call when you have a problem with your respiratory symptoms or treatment. Write their names and numbers in the spaces below

Contact List

| Service | Name | Phone Number |
|------------------|------|--------------|
| Resource Person | | |
| Family Physician | | |
| Respirologist | | |
| Pharmacist | | |
| | | |

Let us look at your Plan of Action when you feel well

In order to be able to recognize changes in your symptoms, you first need to know what your respiratory symptoms are when you feel well.

In your case, what are your usual respiratory symptoms?

To remain well use your Plan of Action to monitor your everyday symptoms, to take your regular medication as prescribed and to maintain healthy life habits.

I Feel Well

| My Usual Respiratory S | ymptoms | | | | | |
|--|---------|-------------|-----------|--|--|--|
| I feel short of breath when I: I cough up sputum daily. □ No □ Yes, colour: I cough regularly. □ No □ Yes | | | | | | |
| My Actions | | | | | | |
| I avoid factors that worsen my symptoms. I sleep and eat well, I do my usual activities and exercises such as: I get vaccinated against the flu and pneumonia as often as recommended. | | | | | | |
| My Regular Treatment is: | | | | | | |
| Medication | Dose | Puffs/pills | Frequency | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Let's look at your Plan of Action when you feel worse

The main trigger that can cause an aggravation of symptoms in COPD (exacerbation) is a respiratory infection.

Imagine that you have a respiratory infection. You notice changes in your sputum and you are more short of breath.

The symptoms of a respiratory infection are:

- 1. Changes in the colour, volume, and/or consistency of your sputum. Your sputum may become yellow or green, sometimes only darker. You may produce more sputum. Your sputum can become thicker.
- 2. More shortness of breath than usual. You find it harder to perform your usual activities.

You may have a cold or flu-like illness and/or sore throat preceding the changes in your sputum and shortness of breath.

In your case, which symptoms do you notice when you have a respiratory infection?

If you recognize the symptoms of a respiratory infection, you must act rapidly. Remember!

- A respiratory infection must be treated within 48 hours following the start of your COPD symptoms.
- Respiratory symptoms that you feel during an exacerbation are often identical from one episode to another so it is important to properly identify them to be able act quickly the next time.

What should you do if you think you have a respiratory infection?

You have to look for changes in your respiratory symptoms in order to decide if you need to start the additional treatment included in your Plan of Action. If not, contact your doctor.

- 1. Observe the changes in your sputum color, volume and consistency (not only in the morning).
 - If the colour of your sputum becomes yellow or green you probably have a bacterial infection and you need to start taking an antibiotic prescribed by your doctor. Do not wait more than 48 hours to start taking an antibiotic.
 - For any other changes in your sputum (volume, consistency) discuss with your physician the need for antibiotics.
- 2. Look at your shortness of breath.
 - If you have more shortness of breath than usual, you should first try to increase your reliever (bronchodilator) as prescribed by your doctor.
 - If after increasing your reliever (bronchodilator) your shortness of breath does not improve and you have difficulty performing your usual activities, you need to start a prednisone treatment prescribed by your doctor. Do not wait more than 48 hours to start a prednisone treatment.

Remember!

By acting quickly (within 48 hours), your recovery will be much less difficult and faster.

In the presence of symptoms of a respiratory infection you have to act promptly

Remember to use your Plan of Action.

- 1. Take the additional treatment prescribed by your doctor according to the changes in your symptoms (changes in your sputum, more shortness of breath than usual) and within the recommended timeline.
- 2. Avoid things that may make your symptoms worse.
- 3. Use your breathing, relaxation, body position and energy conservation techniques.
- 4. Notify your resource person.

I Feel Worse

My respiratory symptoms

- Changes in my sputum (colour, volume, consistency)
- More shortness of breath than usual

Note that these changes may happen after a cold or flu-like illness and/or sore throat



My actions

- I take the additional treatment prescribed by my doctor
- I avoid things that make my symptoms worse
- I use my breathing, relaxation, body position and energy conservation techniques
- I notify my resource person:

Let's now look at your additional treatment when you feel worse

CHANGES IN MY SPUTUM

My additional treatment is:

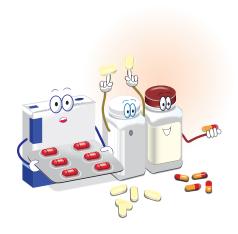


| • | I start my ANTIBIOTIC if my SPUTUM becomes |
|---|--|
| | |

I check my sputum **colour**, volume and consistency (not only in the morning). I do not wait more than 48 hours to start my antibiotic.

| Antibiotic | Dose | Number of Pills | Frequency/days | | |
|------------|------|-----------------|----------------|--|--|
| | | | | | |
| | | | | | |

Comments:



Now let's look at your additional treatment when you feel worse

MORE SHORTNESS OF BREATH THAN USUAL

My additional treatment is:



• I increase my reliever (BRONCHODILATOR) if I am MORE SHORT OF BREATH than usual.

| Bronchodilator | Dose | Number of Puffs | Frequency |
|----------------|------|-----------------|-----------|
| | | | |
| | | | |

Comments:



 I start taking my PREDNISONE if after increasing my Bronchodilator MY SHORTNESS OF BREATH DOES NOT IMPROVE and I have difficulties performing my usual activities.

I do not wait more than 48 hours to start my prednisone.

| Prednisone | Dose | Number of Pills | Frequency/days |
|------------|------|-----------------|----------------|
| | | | |
| | | | |
| | ļ. | | I |

Comments:

Now let's look at your Plan of Action when you feel much worse



What should you do if your respiratory symptoms are not getting better after using your Plan of Action?

Call your resource person or go to the hospital emergency department, if:

- your symptoms get worse or do not improve after 48-72 hours of treatment (antibiotic and/or prednisone)
- your symptoms get worse again shortly after finishing the treatment (antibiotic and/or prednisone)

I Feel Much Worse

| My Symptoms | My Actions |
|--|--|
| After 48-72 hours of treatment (antibiotic and/or prednisone) my symptoms get worse or do not improve. Shortly after finishing the treatment (antibiotic and/or prednisone), my symptoms get worse again. | I call my resource person. After 5 pm or on the weekend, I go to the hospital emergency department. |

Now let's look at your Plan of Action when you feel you are in danger

If you feel you are in danger, don't take a chance, call 911.

I Feel I am in Danger

| My Symptoms | My Actions |
|---|--|
| In any situation if: I am extremely short of breath. I am agitated, confused and/or drowsy. I have chest pain. | • I dial 911 for an ambulance to take me to the hospital emergency department. |

Other recommendations from my doctor about my Plan of Action:



Recognizing and managing a worsening of your respiratory symptoms due to other factors

Factors other than a respiratory infection can also worsen (exacerbate) COPD symptoms. Your symptoms can also be aggravated by the **exposure to environmental factors** or because of **stress/strong emotions**. Let's see how you can manage your symptoms in these situations.

Aggravation of respiratory symptoms following exposure to environmental factors

Environmental factors such as pollutants (cigarette smoke) smog, temperature changes, wind or humidity can worsen your respiratory symptoms, especially shortness of breath. You may also cough and/or expectorate more. **Your symptoms should only worsen for a short period**.

To prevent any worsening of your respiratory symptoms, **avoid factors that contribute to such an aggravation**. If you can't avoid these factors that worsen your symptoms, use your reliever 20 to 30 minutes before exposure to these factors.

Your Plan of Action in this situation

- 1. Immediately take your reliever (bronchodilator) as prescribed by your doctor.
- 2. Prevent or reduce exposure to factors that worsen your symptoms.
- **3.** Use your breathing, relaxation and body positioning techniques.

If your symptoms worsen or do not improve, call your resource person or go to the hospital emergency department.

If you believe that your life is in danger, don't take a chance, call 911.

Recognizing and managing worsening of your respiratory symptoms due to other factors

Emotions and stress can worsen your respiratory symptoms

A stressful situation, in many cases, can be controlled without medications, with the help of breathing and relaxation techniques. Remember that stress can lead to real physical reactions such as increase of shortness of breath, increased heart rate, perspiration, etc.

The use of your reliever (bronchodilator) might be necessary.

Your Plan of Action in this situation

- 1. Use your breathing, relaxation, and body position techniques.
- 2. If necessary, take your reliever (bronchodilator) as prescribed by your doctor.

If your symptoms worsen or do not improve, call your resource person or go to the hospital emergency department.

If you feel that your life is in danger, don't take a chance, call 911.

Check your confidence level in using your Plan of Action

On a scale of 1 to 10, circle the number that best represents the confidence you have in your ability to properly use your Plan of Action.

| <i>J</i> • • | <i>x</i> | Jour di | 0 | P. 0 P 0. 13 | uoo jo | | | •• | | |
|--------------|------------------------|-------------------------|---------------------------|--------------|--------------|-------------|------------|----------|------------------|------------|
| 1.1 | To recogni | ze change | s in your | respirato | ry sympto | oms? | | | | |
| | 1 not at al | 2 Il confiden | 3 | 4 | 5 | 6 | 7 | 8 | 9 very confid | 10 dent |
| 2.1 | To act cor | rectly bas | sed on the | e level of y | our respii | ratory syı | mptoms? | | | |
| | 1 not at al | 2 Il confiden | 3 | 4 | 5 | 6 | 7 | 8 | 9 very confid | 10 dent |
| | Do you thi Symptoms | | our Plan o | f Action v | vill help ya | ou to prevo | ent and m | anage yo | our respira | tory |
| | 1 not at al | 2 Il confiden | 3 | 4 | 5 | 6 | 7 | 8 | 9 very confid | 10 dent |
| | - | - | our Plan o oitalizatio | | vill help yo | ou to prevo | ent visits | to the e | mergency | |
| | 1 not at al | 2 Il confiden | 3 | 4 | 5 | 6 | 7 | 8 | 9 very confid | 10 dent |
| | | | | | | | | | | |

Check whether you feel confident about your Plan of Action

If you feel confident in using it, start using it today!

If you feel that you are not confident in properly using it, what are the reasons?

What can you do to feel more confident about using your Plan of Action?

Contact your resource person and your physician to review your Plan of Action and how you use it, particularly in presence of an aggravation of your symptoms (exacerbation).

Remember:

- If you use your Plan of Action properly, you will become more independent and you will feel more in control when your symptoms worsen!
- Your Plan of Action will make the difference between a visit to the hospital and a treatment at home!

Your Plan of Action should be your constant companion. This is your Plan of Action for life!

Here is an opportunity to plan ahead!

You have learned new skills to better manage your COPD. You need to integrate these new habits into your daily life, and maintain them on a long term basis, if you would like to see positive results on your health and on your quality of life. It is important to establish a plan by writing down your objectives (the small steps are as important as the big ones!) and the time to achieve them.

| My objectives in ord month: 1 | | | | | COPD | for th | e next |
|---|-----------|----------|-----------|-----------|----------|-------------|--------------------|
| 2 | | | | | | | |
| 3 | | | | | | | |
| Are you confident that y | ou can at | tain you | r objecti | ves for t | he next | month? | |
| 1 2 3 not at all confident | 4 | 5 | 6 | 7 | 8 | 9 very c | 10 onfident |
| My objectives in ord months: 1 2 | | | | | | | |
| 3. Are you confident that you | | | | | he next | mor | ıths? |
| 1 2 3 not at all confident | 4 | 5 | 6 | 7 | 8 | 9 very c | 10 onfident |
| Notes: | | | | | | | |
| | | | | | | | |
| Patient's signature | | | Heal | thcare p | rofessio | nal's sig | nature |
| Date: | | | Date |); | | | |

The integration and maintenance of your self-management program

Take the time to review your objectives and your plan.

| 1. Which objectives have you been able to attain? |
|---|
| 2. How did you manage to attain these objectives? |
| 3. Are there any objectives that you have not yet attained? Which ones? |
| |
| 4. What could help you attain these objectives? |
| Notes: |

| Notes: | | | |
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