

Living Well **COPD**TM with

Chronic Obstructive Pulmonary Disease

A plan of action for life

A Learning Tool for Patients and Their Families

Managing Your Breathing and Saving Your Energy

- Understanding how breathing works
- Reducing shortness of breath
 - Breathing techniques
 - Body positions
- Clearing your airways
 - Coughing techniques
 - Active cycle of breathing technique
 - Devices
- Applying energy conservation principles

This guide belongs to:

Health professional:

Institution:

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Living Well
with **COPD**TM

Chronic Obstructive Pulmonary Disease

A plan of action for life

Managing your Breathing and Saving your Energy

3rd Edition 2019

The skills you need to manage your COPD

Chronic obstructive pulmonary disorder, or COPD, is a disease that can seriously affect every part of your life. As the disease progresses, it can take a toll on your daily activities. 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 series of workbooks 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. It 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 in several clinical trials and the results were very encouraging. Patients who used these workbooks in collaboration with their healthcare worker, “case manager” or resource person and physician had fewer exacerbations requiring hospitalizations or emergency room visits. Their quality of life has also improved, enabling them to do more of the activities they enjoyed, and better cope with their disease.

National and international guidelines agree that self-management education is extremely valuable for individuals with COPD. The Living Well with COPD Self-Management Program, which you can adapt to your own situation, was created by medical experts in collaboration with COPD patients.

This 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 or resource person and your physician.

Good luck with your program!



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RESPIPLUS

Welcome to “Managing your Breathing and Saving your Energy” of the learning series Living Well with 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 tired quickly. It can also have an impact on your emotions by making you feel tense and anxious.

Living Well with COPD means reducing your symptoms by managing your breathing and saving your energy in day-to-day activities.

In this module you will learn:

- How breathing works
- Pursed-lip breathing technique
- Body positions to reduce shortness of breath
- Airway clearance techniques
- Principles of energy conservation

Feel your breathing

When you have COPD, you have more difficulty breathing than a person who does not have lung disease.

Take a few minutes to feel your breathing

Put one hand on your stomach and the other on your chest.

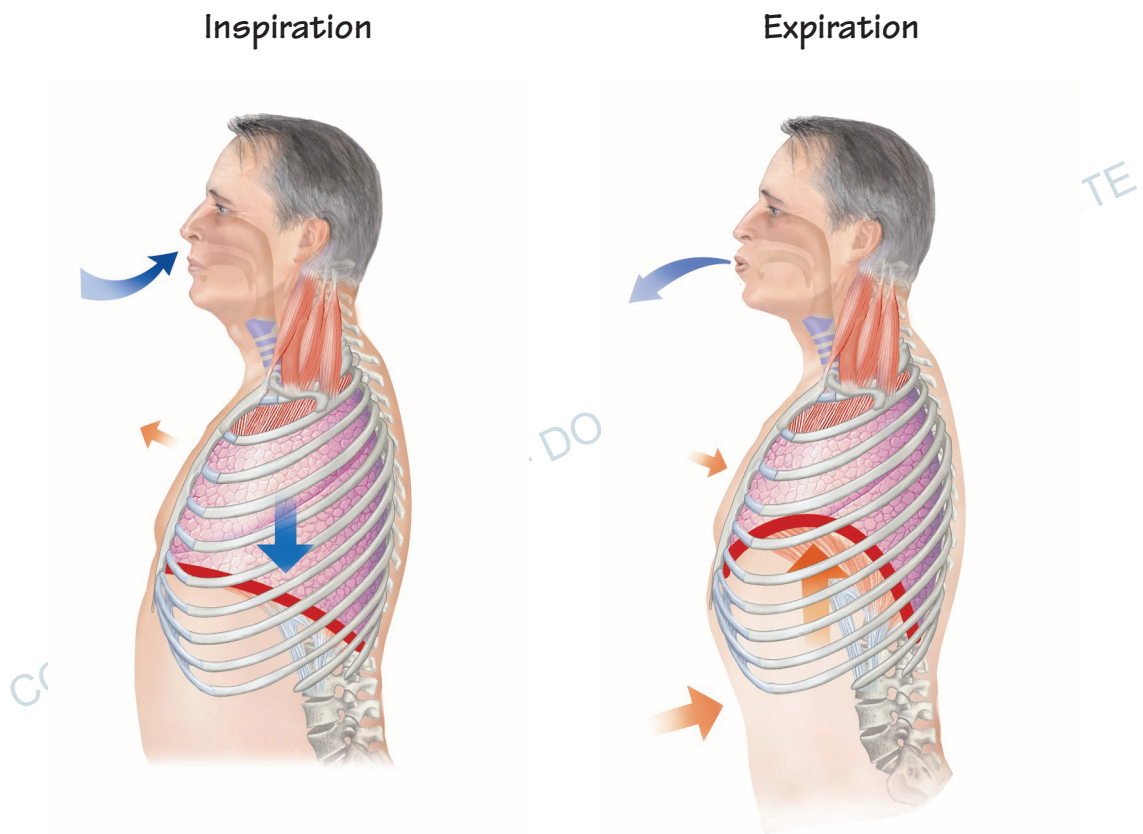
Describe what you feel.



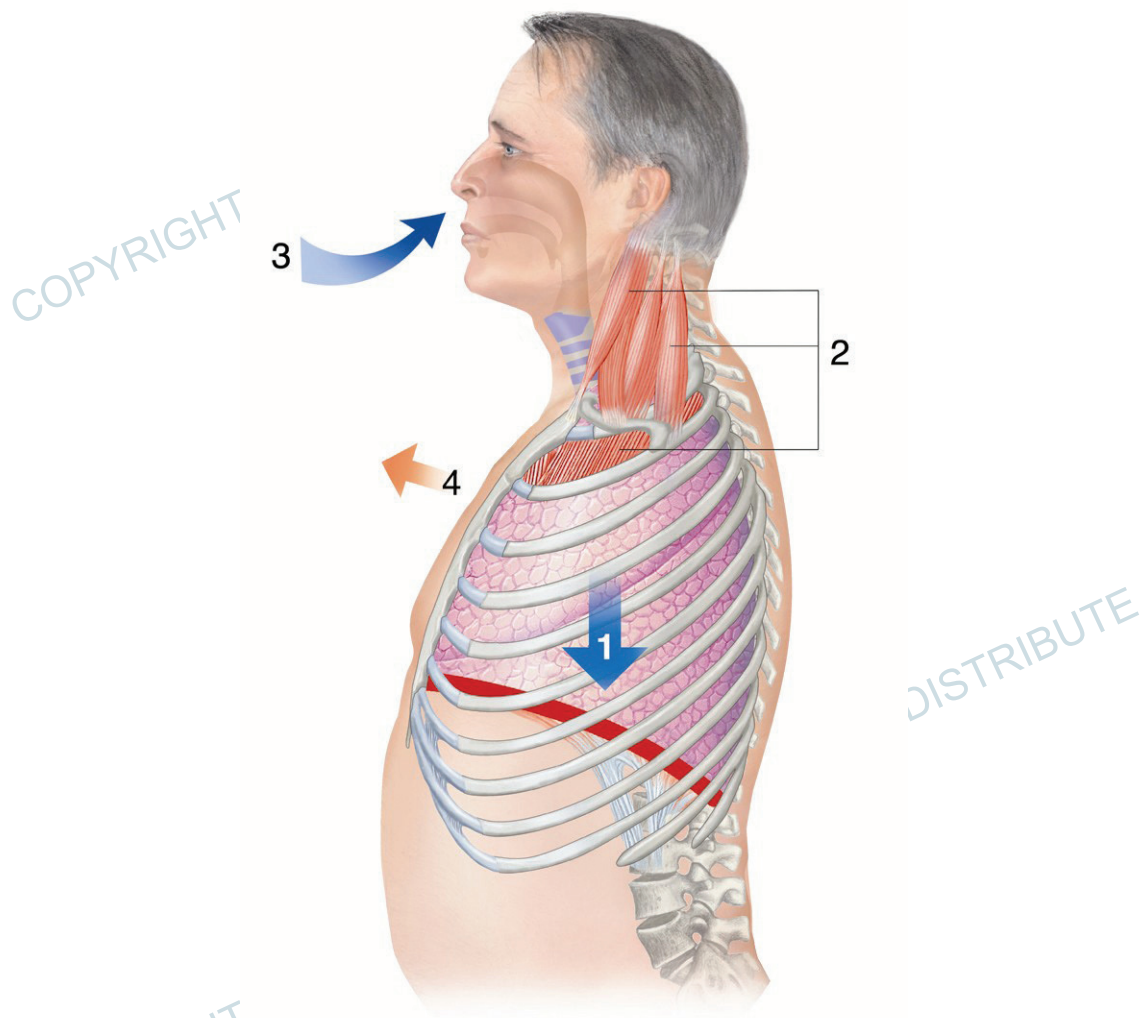
How breathing works

Respiration involves two phases: **inspiration** (movement of air into the lungs) and **expiration** (movement of air out of the lungs).

The diaphragm is the major muscle of respiration. When the diaphragm contracts (goes down), the chest expands so the air is pulled into the lungs. When the diaphragm returns to its normal position (goes up), air is pushed out of the lungs.

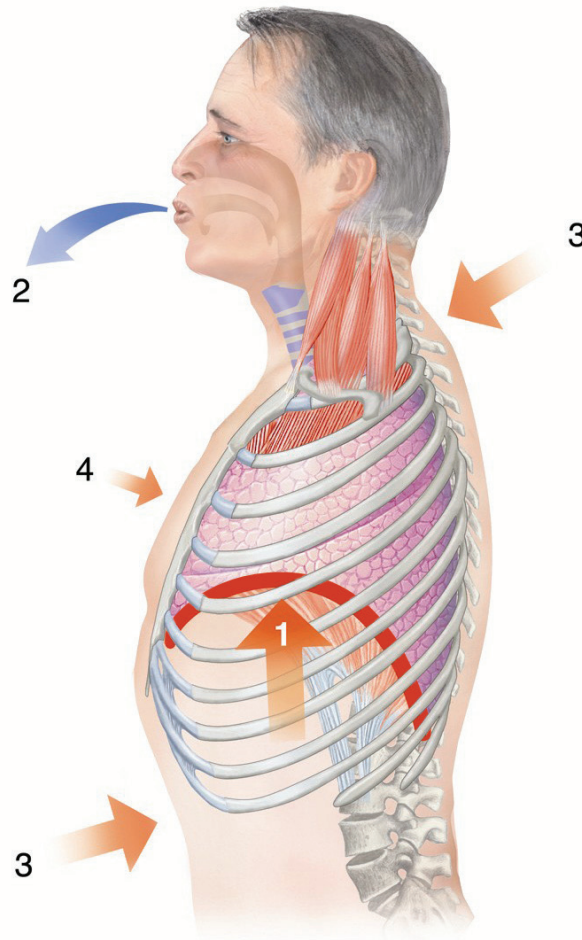


Breathing in COPD – Inspiration



- 1) The diaphragm contracts (goes down) to increase the space inside the chest.
- 2) The muscles from the neck and the ribs (accessory muscles) contract to help the diaphragm.
- 3) As a result, air is pulled inside your chest.
- 4) Your chest expands.

Breathing in COPD - Expiration



- 1) The diaphragm relaxes, as well as the muscles from the neck and the ribs (accessory muscles), which reduces the space inside the chest.
- 2) As a result, air is pushed out of your chest.
- 3) Stomach muscles contract to help push air out of your chest.
- 4) Your chest deflates.

When you have COPD, air is trapped inside your lungs

Air trapping

Because of airway obstruction and a loss of lung elasticity, your lungs do not fully empty, and air is trapped.

Breathing becomes more difficult

As a consequence of air trapping, the diaphragm has to work more and its movement is less efficient. In addition, accessory muscles, from the neck, ribs and stomach start to be used for breathing.

You experience shortness of breath

Because of air trapping in your lungs, you have trouble breathing in new air, and you develop shortness of breath.

Reducing shortness of breath

Being constantly short of breath can make you feel frightened and exhausted. In fact, shortness of breath is one of the major symptoms of COPD leading to anxiety and disability.

The important thing is to control your shortness of breath so that it does not control you!

Your medications can help you reduce air trapping in the lungs, and so can certain breathing techniques and body positions.

If you reduce air trapping you will allow air to get in your lungs more easily, as a result you will feel 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 yes, 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.

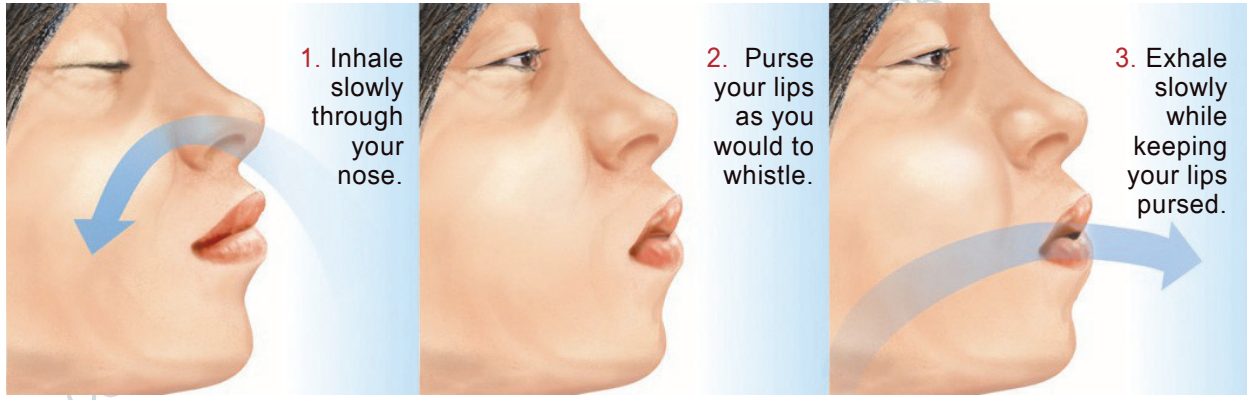
Benefits:

1. Reduces breathing frequency and shortness of breath.
2. Helps you return to your normal breathing pattern after exercise or effort.
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 longer than inspiration, 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



1. Inhale slowly through your nose until you feel that your lungs are filled with air, without forcing.
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.

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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.

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 Always bend at the knees, keeping your back straight.



Pursed-lip breathing technique – on exertion

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.

If you are able to climb a flight full 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.

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.

You have now learned a new technique to reduce shortness of breath

Can you describe some other ways to reduce shortness of breath?

Do you think the way that you stand or sit can affect your breathing?



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 (of the neck and abdomen) 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.

Body 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 or leaning too hard on the table. This can overwork some of your accessory breathing muscles, and cause breathlessness if you hold the position too long.



Take another look at your breathing

Did your breathing change when you used one of the body positions previously described?

How did it feel different?

Your breathing will change according to how you hold your body.

Remember:

- Use the body positions you have just learned when you feel short of breath or as often as you would like. They will help you accomplish your daily activities.

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

Experiencing an acute attack of shortness of breath can be frightening. 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.

Points 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.
3. Lean your head slightly forward.
4. Relax your shoulders.
5. Inhale through your mouth.
6. Exhale through your mouth, while trying to breathe through pursed-lips.
7. Inhale and exhale as fast as needed.
8. Start to exhale slowly without forcing the exhalation.
All the while using pursed-lip breathing.
9. Slow your breathing.
10. Start to inhale through your nose.
11. Continue to pursed-lip breathe for at least 5 minutes.

Do you think your friends and family can help you when you are experiencing an attack of shortness of breath?

If yes, consider how they can help you.

Suggestions for friends and family

Watching someone going through an attack of shortness of breath can be upsetting and frightening.

Be prepared. Let the people close to you know what to do if you find yourself short of breath.

Ask your friends or family members to:

- Talk to you slowly, be supportive and provide reassurance.
- Help you to concentrate on your breathing.
- Remind you to take a position to reduce shortness of breath. This can help you breathe easier.
- Help you to take your rescue medication as prescribed in your Plan of Action.
- Monitor your symptoms closely.
- Call for help and ask questions from the contacts identified in the Plan of Action.
- Help you find a way to get to the hospital.

Airway clearance techniques

Cough and sputum are two other symptoms experienced by some people with COPD.

But did you know that some airway clearance 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.

Airway clearance techniques are therefore important, as they help to remove sputum from your lungs.

A regular hacking cough is often inefficient and exhausting.

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

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Airway clearance techniques

Are coughing and secretions an issue for you? If yes, what are the problems?

Do you get tired from coughing?

What strategies do you use to eliminate secretions from your lungs?

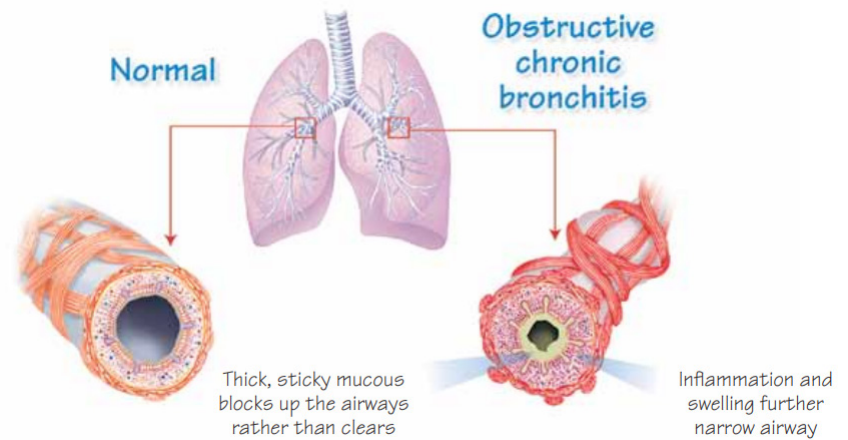
If you have sputum, how do you manage it during an exacerbation?

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

If you have problems clearing your secretions, ask your resource person which techniques and strategies you can use to help with this.

Airway clearance techniques

The accumulation of sputum in the bronchi is a consequence of exposure to cigarette smoke, respiratory infections and inflammation of the respiratory tract. The mechanisms responsible include excessive overproduction of secretions, decreased function of the cilia that promote sputum uptake, closure of the small bronchi and ineffective coughing.



Goal:

- Mobilize and remove sputum from your lungs with less effort

Benefits:

- Reduce your shortness of breath
- Improve gas exchange
- Save energy by reducing the effort needed to breathe
- Prevent repeated infections (exacerbations)
- Improve your quality of life

Points to remember:

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

Techniques and devices for airway clearance

Here are the different techniques you can use to mobilize and eliminate the sputum in your lungs:

- Controlled coughing and “huffing” techniques that can help you to get rid of sputum.
- Active cycle of breathing techniques.
- Oscillating Positive Expiratory Pressure (OPEP) devices that help loosen and move sputum up your bronchial tubes.

These techniques and/or devices should be a part of your treatment regimen.

Note

If your secretions change colour, follow the recommendations in your Action Plan. If there is blood in your secretions, contact your physician immediately.

Controlled coughing technique

Goal:

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

Benefits:

- Prevents infections caused by increased accumulation of sputum in your lungs.
- Reduces shortness of breath caused by the 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. Lean your head slightly forward.
3. Place both feet firmly on the ground.
4. Inhale deeply through your nose without forcing.
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 and check the colour.
6. Take a break and repeat once or twice if there are no immediate results.

“Huffing” technique

Goals:

- To remove sputum from the lungs while using less effort.
- To save energy.
- To prevent infections caused by an increase of sputum in your lungs.

Benefits:

- Conserves your energy by helping remove sputum with an efficient technique.
- Prevents infections caused by an increase of sputum in your lungs.

Steps

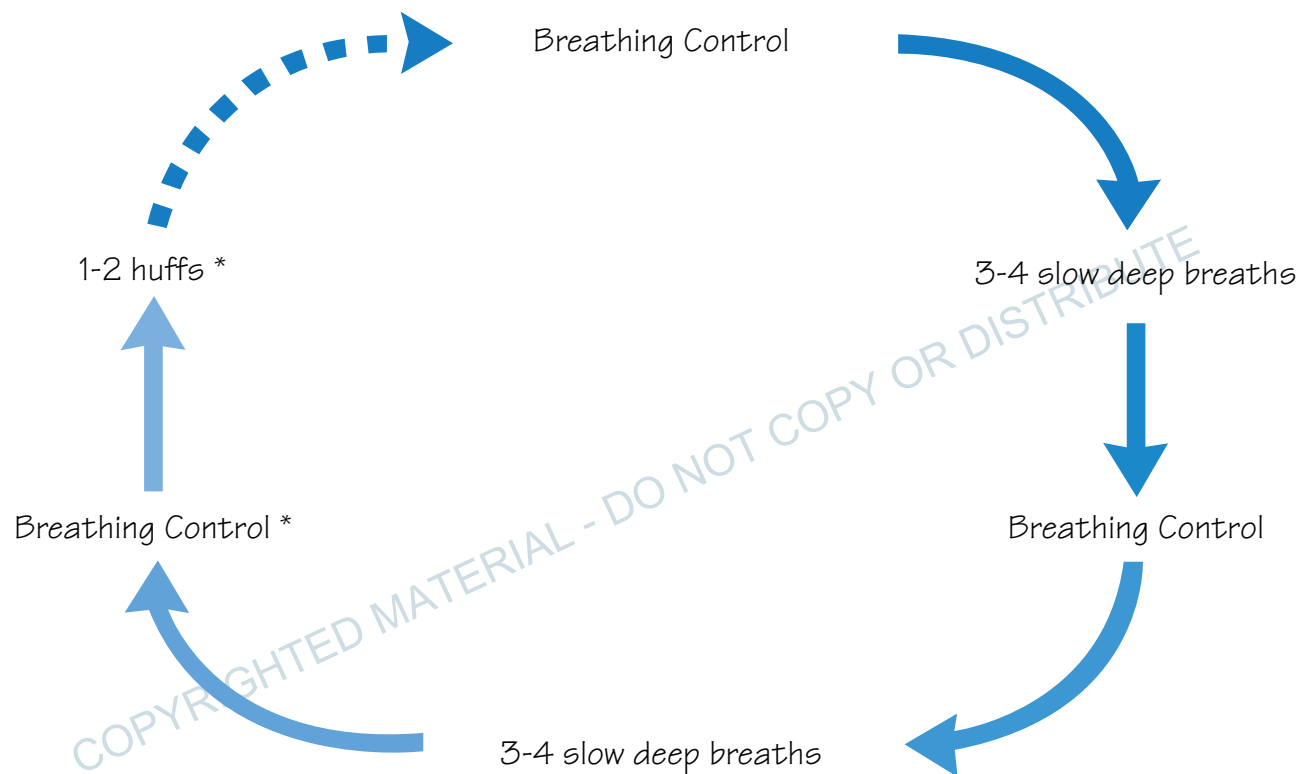
1. Sit yourself in a comfortable position.
2. Lean your head slightly forward.
3. Place both feet firmly on the ground.
4. Inhale deeply through your nose.
5. Exhale in short, non-forceful bursts (“huffs”) while keeping your mouth open, as if you were trying to make mist on a window.
6. Repeat 2-3 times.

“Active cycle of breathing” technique

The "active cycle of breathing" technique is a combination of multiple techniques that makes airway clearance even more effective. The objectives of this technique are to loosen and expel sputum.

This technique is divided into several phases:

- Controlled breathing
- Slow deep breaths
- “Huffing” technique (or controlled coughing, as needed)



* Repeat the controlled breathing and huffing techniques as needed, before restarting the cycle.

“Active cycle of breathing” technique

Steps

1. Seat yourself in a comfortable position, shoulders and neck relaxed.
2. **Controlled breathing:** Place one hand on your stomach. Breathe at your own pace until you feel relaxed and ready to move on to the more active phases of the cycle (20-30 seconds). You should feel your hand move as you breathe. Use the nose for inspiration to make breathing more comfortable.
3. **Then take 3-4 slow, deep breaths** (with the belly). If possible, hold your breath for 3 seconds after each breath. Repeat **steps 2 and 3** once.
4. End with **controlled breathing**.
5. Proceed with the **"huffing" technique**.
6. The **"huffing" technique** can be performed 1 to 2 times, as needed, at the end of each active cycle.
 - The **controlled coughing technique** can also be used if the "huffing" technique is ineffective or you feel more comfortable.

“Active cycle of breathing” technique

The complete Active cycle of breathing technique needs to be repeated until the “huffing” technique no longer produces any sputum, or if you feel fatigued.

In general, the complete cycle lasts between 10 to maximum 30 minutes, but the duration will vary from one person to another, even from one day to the next. Your healthcare professional will determine with you the length and frequency of the sessions according to your needs (i.e your treatments may last longer, or you may need more treatments in a day during exacerbations).

This technique can be performed in many different positions. With the help of your healthcare professional, you will be able to determine the position(s) in which the technique is most effective for you.

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Oscillating Positive Expiratory Pressure (OPEP) devices

Goals

- Prevent rapid closure of the airways by exhaling into the device.
- Allow mobilization of your sputum, due to vibrations transmitted into your bronchi.

Benefits

- Improve your capacity to eliminate sputum with less effort.
- Provide more autonomy. Devices can be used whenever you choose, with no medical assistance required.

Note

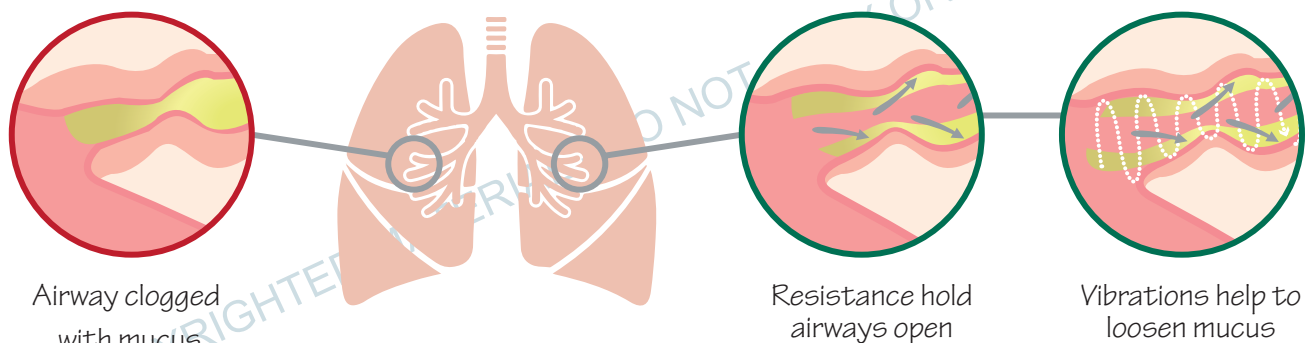
The use of these devices is not indicated for certain individuals. Discuss with your healthcare professional the conditions that determine whether or not you can use any of these devices.

Oscillating Positive Expiratory Pressure (OPEP) devices

Do you already use a device to help mobilize your sputum? If so, which one(s)?

How OPEP devices work

As you exhale through an OPEP device, the device creates resistance against your exhalation, which allows your airways to remain open. At the same time, the device transmits vibrations into your bronchial tubes which permits the sputum to be loosened from the walls of your lungs, making it easier to be eliminated.



Oscillating Positive Expiratory Pressure (OPEP) devices

Here are some examples of OPEP devices, currently available in Canada, that your healthcare professional may suggest you use:

Acapella® device



Aerobika® device



Flutter® device

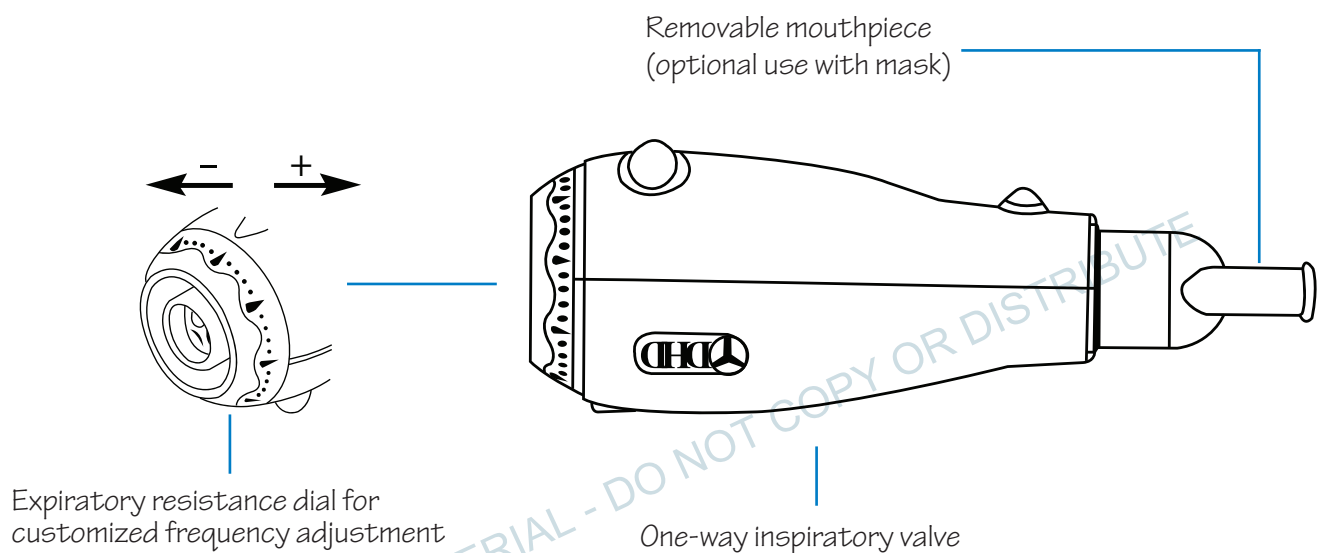


It is possible that you will use a different device. Consult your healthcare professional to discuss the benefits and directions.

Acapella device

How does this device work?

- The Acapella device directs exhaled air into a cone that closes and opens successively, creating intermittent resistance over exhalation. The device then transmits vibrations into the bronchial tubes, which helps to loosen and displace sputum.
- Your healthcare professional will help you find the best setting for resistance and frequency. The possible settings range from 1 to 5, with 1 being the easiest and 5 the most difficult.



Benefits

- Allows inhalation and exhalation through the device without removing the mouthpiece.
- Can be used in any position (sitting, standing or reclined), allowing you to move freely.

Acapella device

Directions for use

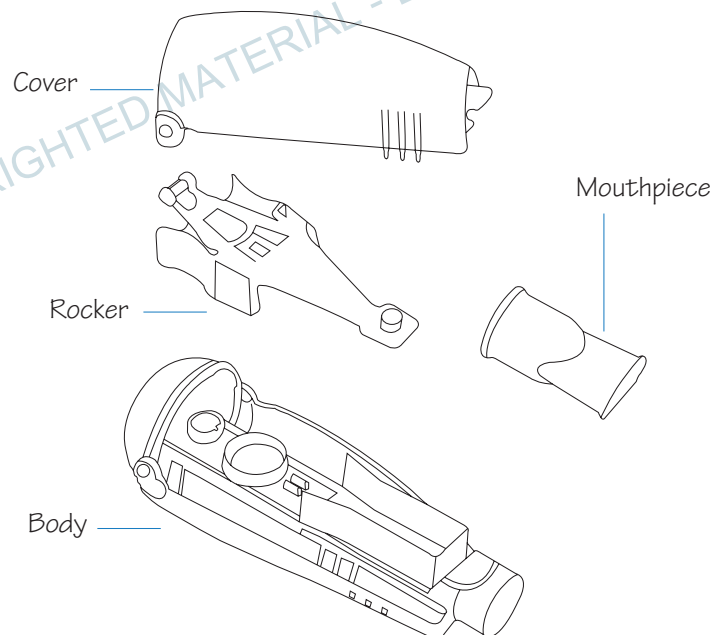
1. Choose a comfortable position. Place the mouthpiece in your mouth and close your lips around it to ensure an effective seal.
2. Inhale through the device taking a deeper breath than normal, without completely filling your lungs.
3. Hold your breath for 2-3 seconds
4. Actively exhale, but not forcefully, through the device, keeping your cheeks flat and firm. Ideally, exhalation should last 3-4 times longer than inhalation. Try to suppress coughing in order to maximize sputum release
5. Complete 10-20 breaths, or as many recommended by your healthcare professional. Remove the mouthpiece and do 2-3 "huffing" technique coughs to clear the sputum from your airways (as described on page 25). Keep some tissue paper at hand to cough into.
6. Wait 30-60 seconds and continue the cycle 3-6 times, as recommended by your healthcare professional.

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Acapella device

Additional notes

1. The Acapella device is a single-user device (should not be shared).
2. Before usage, carefully inspect the device. If there is a defect, replace it immediately. Make sure the expiratory resistance dial is set according to your healthcare professional's instructions.
3. When using, make sure to not cover the exhalation path at the back of the device with your hands.
4. Use your Acapella device regularly, at least twice a day or as recommended by your healthcare professional.
5. To avoid bacterial growth, it is very important to clean and disinfect the device on a regular basis.
 - The device must be taken apart after every use, cleaned with hot water and a gentle dish soap, rinsed with hot water and shaken.
 - Place the 4 separate parts on an absorbent paper towel until all parts are completely dry. Never use a cloth towel, as you want to avoid lint getting into the device.
 - The device must be disinfected once a day (follow the manufacturer's instructions and those of your healthcare professional).



Aerobika device

How does this device work?

- As you exhale through the Aerobika device, a valve creates an intermittent resistance. The device then transmits vibrations through your bronchioles, which helps to loosen and move your sputum. The frequency of the vibrations is influenced by the resistance setting.
- The resistance will be adjusted by your healthcare professional according to your needs. The resistance will be set so exhalation lasts for 3–4 times longer than inhalation.

Removable
mouthpiece

Resistance Indicator
adjustor



Benefits

- Increases pulmonary function and quality of life for certain patients.
- Decreases the frequency of exacerbations, emergency room visits, hospitalizations and the use of cortisone and antibiotics.
- Allows inhalation and exhalation through the device without removing the mouthpiece.
- Is very light and easy to hold in any position (sitting, standing or reclined), allowing you to move freely.
- Is durable and easy to clean (dishwasher safe).

Aerobika device

Directions for use

1. Choose a comfortable position. Place the mouthpiece in your mouth, between your teeth, and close your lips around it.
2. Inhale deeply through the device, without completely filling your lungs.
3. Hold your breath for 2-3 seconds.
4. Actively exhale, but not forcefully, through the device. Keep your cheeks flat and firm. Ideally, exhalation should last 3-4 times longer than inhalation. Try to suppress coughing for maximum sputum release.
5. Complete 10-20 breaths through the device, as recommended by your healthcare professional. After at least 10 breaths, remove the mouthpiece and do 2-3 "huffing" technique coughs and, if necessary, do 2-3 controlled coughs to eliminate the sputum (as described on pages 24-25). Keep some tissue paper at hand to cough into.
6. Wait 30-60 seconds and continue the cycle 3-6 times, as recommended by your healthcare professional.

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Aerobika device

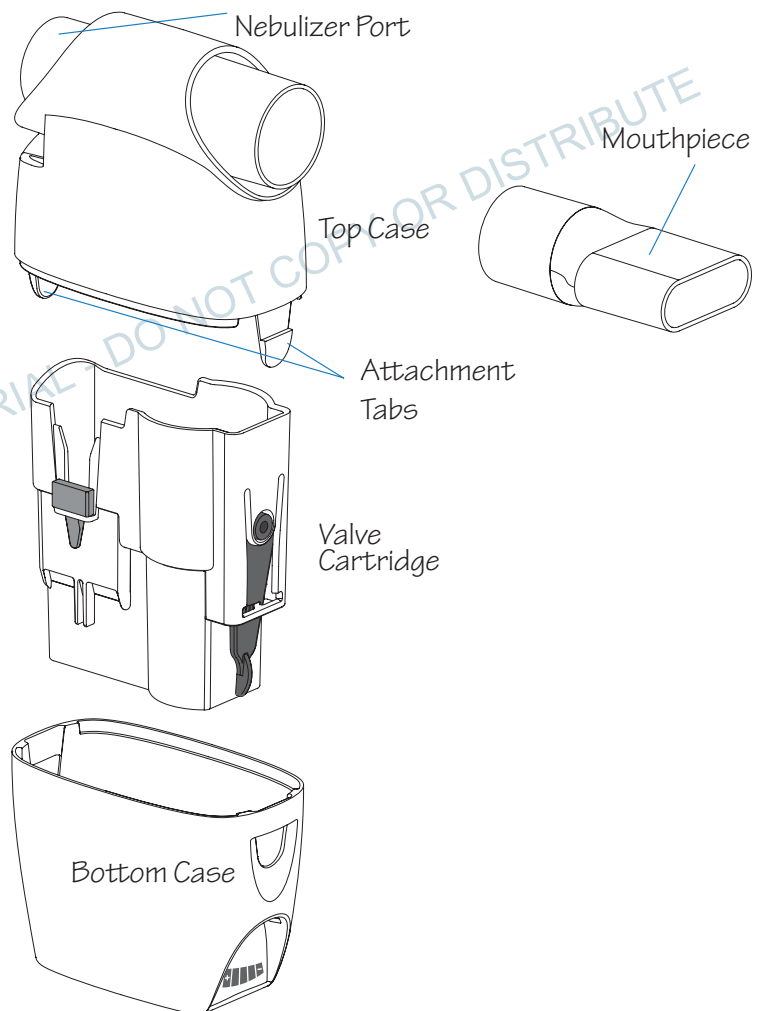
Additional notes

1. Aerobika device is a single-user device (should not be shared).
2. Before usage, carefully inspect the device. If there is a defect, replace it immediately. Make sure the resistance adjustment knob is set according to your healthcare professional's instructions.
3. When using, make sure to not cover the exhalation path at the back of the device with your hands.
4. Use your Aerobika device regularly, at least 2 times a day, or that recommended by your healthcare professional. In the event there is more sputum than usual, increase to 3-4 times per day.
5. In order to avoid the growth of bacteria, it is very important to clean and disinfect the device regularly.

- The device must be cleaned at the end of each day. Once the parts have been disassembled, they must be soaked for 15 minutes in hot soap water (a gentle soap). Shake them gently before rinsing with hot water.

- Note that this device is dishwasher safe. To dry the parts, shake them and place them on an absorbent towel until all the parts are completely dry.

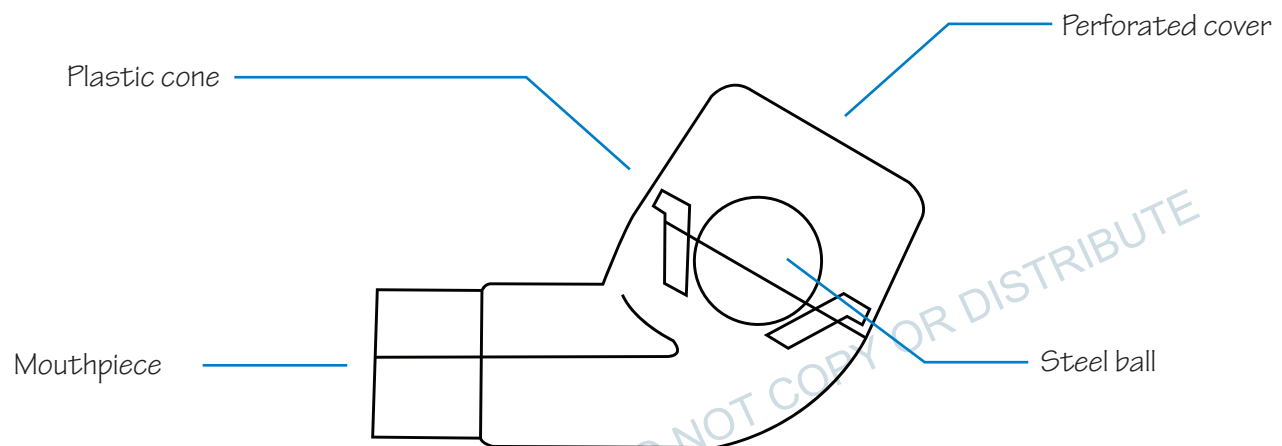
- The device must be disinfected once a week (follow the manufacturer's instructions and those of your healthcare professional).



Flutter device

How does this device work?

- As you exhale through the device, the steel ball inside the device bounces up and down, creating an intermittent resistance against the passage of air and therefore transmits vibrations in the bronchi, which will help loosen and move the sputum.
- The angle at which the device is held is very important as it determines the frequency of the vibrations. Your healthcare professional will help you determine which angle will maximize the vibrations in your chest, and therefore allow the most sputum to be eliminated.



Benefits

- Increase pulmonary function.
- Reduce shortness of breath and improve the ability to engage in physical activity.

Flutter device

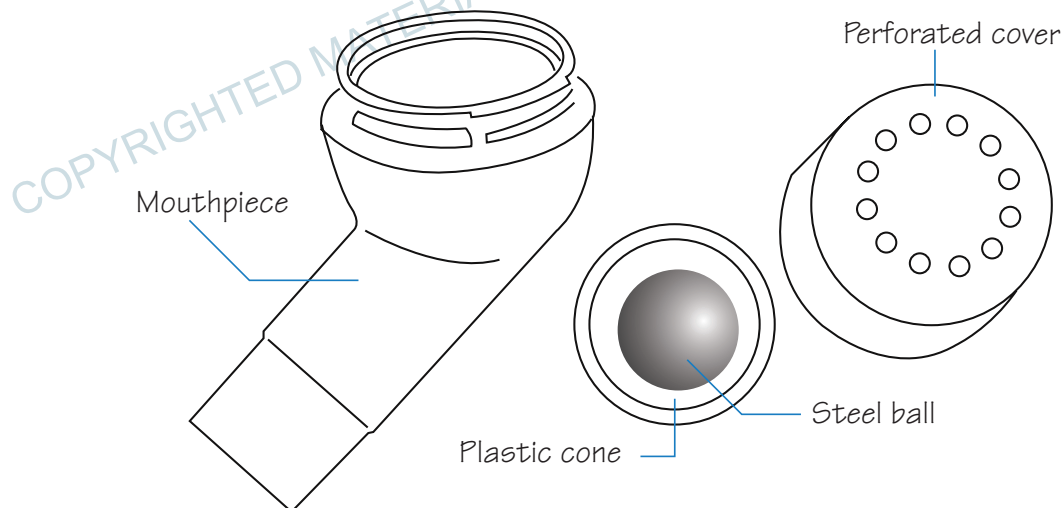
Directions for use

1. Sit comfortably, back straight and head slightly tilted upwards.
2. Inhale through the nose, without completely filling your lungs.
3. Place the mouthpiece in your mouth and close your lips around it to ensure an effective seal.
4. Place the device at the appropriate angle, either slightly upwards or downwards, to maximize the effects of the vibrations in your chest.
5. Hold your breath for 2-3 seconds.
6. Actively exhale, but not forcefully, through the device. Keep your cheeks firm. Ideally, exhalation should last 3-4 times longer than inhalation. Try to suppress coughing for maximum sputum release.
7. Complete 15 breaths in the device, according to the recommendations of your healthcare professional.
8. Complete an additional 1-2 breaths in the Flutter device, however, this time breathe in slowly through the nose as slowly and comfortably as possible.
9. Hold your breath for 2-3 seconds.
10. Forcefully exhale through the device in the most complete and comfortable way possible, without completely emptying your lungs.
11. Remove the mouthpiece and do 2-3 "huffing" technique coughs and, if necessary, do 2-3 controlled coughs to eliminate the sputum (as described on pages 24-25). Keep some tissue paper at hand to cough into.
12. Wait 30-60 seconds and continue the cycle 3-6 times, as recommended by your healthcare professional.

Flutter device

Additional notes

1. The Flutter device is a single-user device (not to be shared)
2. Before usage, carefully inspect the device. If there is a defect, replace it immediately.
3. When using, make sure to not cover the exhalation holes on the end of the device with your hands.
4. Use your Flutter device regularly, at least 2 times a day, or that recommended by your healthcare professional.
5. In order to avoid the growth of bacteria:
 - After each use, the device must be disassembled, rinsed with clean water and wiped with a clean, dry paper towel.
 - Every 2 days, the device must be cleaned with hot water and mild dish soap. Shake the 4 parts and place them on an absorbent paper towel until all parts are completely dry.



Here are some more suggestions to help you remove sputum from your lungs

1. Sputum can accumulate in your airways overnight. You should try to use your coughing techniques each morning.
2. Similarly, in order to get a good night's sleep, you could use these techniques in the evening before going to bed or before dinner.
3. Repeat your coughing techniques as needed, throughout the day, e.g. before going out.
4. Avoid bursts of coughing. This wastes your energy and could worsen your shortness of breath.
5. Keep these techniques in your routine, even if you don't seem to be removing that much sputum.
6. Make sure to stay well hydrated, this can help liquefy your sputum.
7. Move regularly. This will help to mobilize your sputum.

Save your energy

Imagine yourself waking up on a beautiful, sunny morning

You stretch your arms and look through the window at the bright sunlight. You see that it is a perfect day for getting out and about.

Describe your breathing when you are brushing your teeth, shaving or combing your hair.

Describe your breathing when getting dressed or taking a shower.

Do you have to stop? Are you out of breath? In which way is your breathing different?

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 delay the onset of fatigue.

Goal:

- To perform more effectively 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.

Points to remember:

- Try to get a sense of the times of the day when you have the least and most amount of energy.
- Do not forget to do activities that help you relax and recharge.
- Avoid rushing, even if you are the type of person who finds it hard to slow down.
- Do not try to do everything at once.
- Be aware of your body position and your breathing when performing an activity.

Energy conservation principles

1. Prioritize your activities

- Evaluate what you have to do and what you would love to do.
- Eliminate activities that are not necessary.

2. Plan your schedule

- Stay active within your limits.
- Plan a realistic schedule for the day, week or month.
- Try to schedule the activities that require more energy (e.g. grocery shopping, medical appointments, vacuuming), at the time of day you have the most energy.

3. Pace yourself

- Understand your limits and respect them.
- Slow down your rhythm: a slower and regular rhythm uses up less energy.
- Slow down when you speak, laugh, eat or cough, since these actions can interrupt your regular breathing rhythm, causing shortness of breath.
- Alternate heavy and light tasks, e.g. don't go grocery shopping the same day you're vacuuming.
- Sub-divide difficult tasks into smaller steps.
- Include relaxation breaks in your schedule.
- Get a good night's sleep.

Energy conservation principles

4. Positioning

- Be aware of what movements (e.g. bending or reaching) cause you more shortness of breath or fatigue.
- See how you can organize the storage spaces in your house to reduce the need for reaching and bending.
- Try to work with your elbows and/or forearms supported.
- Avoid carrying heavy objects. Pushing, pulling or sliding objects is less demanding.
- When you must carry something heavy, hold it as close to your body as possible.
- Work at a height that allows you to keep a good posture.
- If you feel tired, perform most of your activities while sitting (you will use less energy sitting than standing).

5. Pursed-lip breathing technique

- Use pursed-lip breathing when doing physical activities.
- Exhale when an effort is required (e.g. when opening a heavy door: inhale, then exhale as you pull the door open).

6. Positive attitude

- Try to be patient and tolerant towards yourself and your family and friends.
- Keep your sense of humour.
- Visualize yourself as a person who makes the most of what they have, rather than as a victim of your disease.

Integration of energy conservation principles

How would you apply some of these principles when doing some of your daily activities? Give some examples.

Test your confidence level

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 module.

1. To use your pursed-lip breathing technique in your daily activities?

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

2. To apply body positions to reduce shortness of breath?

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

3. To manage your breathing during an attack of shortness of breath?

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

4. To use airway clearance techniques to clear the sputum in your lungs?

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

5. To integrate energy conservation principles into your daily life?

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

6. Do you think the breathing techniques taught in this module can help you to better manage your shortness of breath?

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

7. Do you think that energy conservation principles can be useful in your daily life?

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

Improve your confidence level

If you feel confident to manage your breathing and save your energy, continue to apply the techniques taught in this module on your daily life.

If you feel that you are not able to manage your breathing and save your energy, what are the reasons?

What could you do to feel more confident in using the techniques taught in this module?

Remember:

Shortness of breath in COPD is a part of daily life. Nothing will make it go away completely.

However, regularly using the breathing and airway clearance techniques, body positions and energy conservation principles outlined in this module will help you to reduce your shortness of breath and fatigue significantly – and live better with COPD.

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H. Tremblay, expert patient

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