Management of Chronic Obstructive Lung Disease
慢性阻塞性肺病的治療與護理

Chapter Three
Put Yourself in Control
LEARNING HELPFUL WAYS TO BREATHE
Learning helpful ways to breathe means learning to use your lungs smarter rather than harder

Shortness of breath is often a major symptom for those with COPD, especially when exerting energy, under stress, or occasionally, for no apparent reason. There are techniques in this handbook to help control your breathing and clear your lungs of excess mucus, which, with your doctor’s approval, may help keep your airways open so you can breathe easier.

Controlling Your Breathing
Pursed-Lip Breathing
One of the simplest ways to control your breathing is pursed-lip breathing – a technique which helps keep the airways and air sacs open and slows down your breathing. By using this technique, any used air trapped within the lungs can be released, allowing fresh air to replace it.

To do pursed-lip breathing:
1. Slowly breathe in through your nose, keeping your mouth closed. It’s not necessary to take a deep breath; a normal one will do.  
2. Pucker your lips in a whistling position and breathe out slowly, gently tightening your stomach muscles to help push the air out through your lips.

Be sure to use enough pressure to make a sound, but do not force exhalation. Stay relaxed and exhale at least twice as long as you inhale. For example, when doing pursed-lip breathing, inhale through your nose for two counts… one-two. Then purse your lips and exhale for four counts… one-two-three-four. That’s all there is to it! Practice this breathing when you are doing any physical activity or when you are short of breath.

When to do it
• As often as you can
• Whenever you do anything that makes you short of breath such as climbing stairs, bathing or doing housework.
• During the night, if you have a breathless spell, sit with your feet on the floor, and do pursed lip breathing until you feel better.

How does it work?
The air in your lungs is trapped, stale air. Before you can breathe in fresh air, you need to get the old air out. That’s hard because of clogged, narrow airways or damaged air sacs deep in your lungs or both. When you breathe out slowly through pursed lips, you keep up the air pressure in your airways. This helps the airways to stay open so that you can breathe out more stale air.

Another breathing technique, which works hand-in-hand with pursed-lip breathing, is diaphragmatic breathing, more commonly known as belly breathing.

Diaphragmatic Breathing
Individuals with chronic respiratory disease often have a weakened flattened diaphragm (the major muscle of breathing). It’s weakened because other less efficient muscles in the neck and chest are used to breathe. It’s flattened because the air trapped in the lungs pushes down on the diaphragm and, in time, flattens it.

**Diaphragmatic Breathing** (or belly breathing) involves training and strengthening your diaphragm to ease the work required for each breath.

**To do diaphragmatic breathing:**
1. Start by placing one hand on your belly just below the ribs and the other hand on the upper part of your chest.
2. Breathe in through your nose so that your belly moves out against your hand as far as it will go. Keep the other hand on your chest, which should be as still as possible.
3. As you breathe out slowly and fully through pursed lips, press your belly gently upward and inward with your hand.

*There are two important things to remember when doing belly breathing. Concentrate on exhaling at least twice as long as you inhale. Also, keep your chest still so that it is your diaphragm and not your neck and chest muscles that do the work of breathing.*

Important: To be sure your diaphragm is moving properly, ask your doctor, nurse or physical therapist to go through the exercise with you.

**How does it work?**
When your airways get clogged with mucus, you have an urge to cough to get rid of it. To move the mucus, you need a strong jet of air behind it. A useless, hacking cough happens when you keep coughing because of a tickle in your throat, but you don’t have enough air to move the mucus. Your cough seems out of control, and you feel helpless. When you learn to cough from deep in your lungs, you put air power into your cough. Learning to move your diaphragm more as you breathe will give you more push power to empty your lungs.

**Exercise Your Chest Muscles**
Breathing is easier when you use all your breathing muscles. The muscles around your lower rib cage are probably tight. The following exercise helps you get them moving. It will help your lower lungs expand better and make it easier for you to breathe deeply.

To exercise those muscles, follow these steps:
1. Place your hands on the sides of your lower chest.
2. Breathe in slowly through pursed lips. Your lower chest should move your hands out. Keep your shoulders and upper chest relaxed.
3. Breathe out slowly through pursed lips.

Practice that exercise several times a day for a few minutes at a time.
Rest if you feel dizzy.
Note: Exercise is helpful in some types of lung disease and not in others. Be sure to check with your doctor, nurse, or physical therapist before making it a part of your daily program.

**When to do it**
- As often as you can
- Whenever you are short of breath
- Every time you feel like coughing, follow the above steps. Do not try to keep yourself from coughing. Check with your doctor before using any cough medicine. Your goal is **not** to stop coughing. It is to use your cough to help clear your airways whenever you need to.

**Clearing Your Lungs**
In addition to shortness of breath, many people with a chronic breathing problem also have trouble with excess bronchial secretions at one time or another. For this reason, it may be helpful to discuss some
effective methods for dealing with excess mucus when it becomes a problem.

A good way to help keep secretions thin and easy to bring up is to drink plenty of liquids throughout the day. One rule of thumb is to drink at least 6 to 8 eight-ounce glasses of water or other liquids per day, unless you have a problem with fluid retention. In that case, your fluid intake should be discussed with your physician.

Clear your lungs at least twice a day:
• Before breakfast to clear the mucus that has built up during the night.
• In the evening, at least an hour before bedtime, for a better night’s sleep.
• If you have a cold or an infection, clear your lungs before meals to avoid upsetting your stomach.

I) Coughing Effectively
One of the simplest, most productive ways to clear excess mucus from the passageways in your lungs is by using an effective cough. When we speak of coughing as a technique to help clear the lungs, we’re speaking of learning to control your coughing so that it comes from deep in the lungs and has enough air pressure to force out the excess mucus.

The best time to use an effective cough technique is upon waking up in the morning. This is when your cough will be most productive. To cough effectively, you should be in an upright position. You may wish to have a glass of water to rinse your mouth and a supply of tissues on hand to dispose of excess mucus.

To cough effectively:
1. Inhale slowly and deeply through your nose, pushing your stomach out as far as it will go.
2. Next, exhale slowly and fully with your lips pursed, remembering to breathe out twice as long as you breathe in. Your stomach should move back to its original position.
3. Now inhale slowly and deeply once again but instead of exhaling this time, bend slightly forward and cough two or three times. Keep your mouth open but covered with a tissue.

Be sure not to take any quick breaths between the coughs because they might interfere with the movement of secretions up and out of the lungs. It may also be helpful to gently push up on your stomach, while you are coughing, to help force the air out. This is one of the simplest and most effective ways of clearing your lungs and can be done just about anywhere.

To get the maximum benefit from any clearing technique, as well as from other techniques for controlling your breathing, it is important to be relaxed and comfortable. This includes:
• Wearing loose, comfortable clothing
• Clearing your mouth of all food or gum
• Not practicing on a full stomach

NOTE: Try to use this effective cough technique any time you cough or feel the need to cough.

Controlling your cough
Coughing spells can make you feel tired, frightened, and short of breath. When it happens in public, you may feel embarrassed.

You can control your cough and make it useful. A cough is useful when it brings up mucus and helps to clear your airways. A useful cough should not tire you or take your breath away, and it should not embarrass you. When you feel a cough coming on, follow these steps:
1. Breathe in deeply.
2. Hold your breath for a few seconds.
3. Cough twice, first to loosen mucus, then to bring it up.
4. Get rid of mucus. Use strong tissues or paper towels. Swallowing mucus can upset your stomach.

The best position for coughing usefully is to sit with your head slightly forward, feet on the floor.
II) Positions To Clear Your Lungs
The following three positions may help you clear mucus from your lungs. Your physician will choose one that best suits you. These mucus-clearing positions can decrease the amount of doctor and hospital visits.

Follow these steps:
1. Lie in the position ordered for you, with your hips on top of a thick pillow or cushion.
2. Practice pursed-lip breathing to open your airways.
3. When you feel like coughing, cough usefully to bring up mucus. Don’t swallow it.
4. Stay in that position for the length of time prescribed. Cough to bring up mucus. Then repeat those steps in the other positions ordered for you. Stop and rest if you become very short of breath.

III) Exercises To Clear Your Lungs
Your physician will choose which kind is beneficial for you. These exercises will become easier after practice.

Knee Raising
- Lie down, with both knees bent, raise your right knee towards your chest as you breathe out.
- Breathe in as you lower your leg.
- Repeat with your left leg, then both legs.

Note: If it’s easier for you, you may breathe in while raising your legs and breathe out while lowering them.

Forward Bending
- Begin by sitting with your feet apart, flat on the floor. Keep your shoulders relaxed.
- As you exhale, lower your head to your chest and slowly roll your body forward towards your knees.
- Inhale slowly and return to an upright position.
- Relax and repeat.

Arm Raising
- Raise your arms as you breathe in.
- Lower them slowly as you breathe out.

Trunk Turning
- Sit in a straight back chair with your shoulders relaxed and breathe in.
- As you breathe out slowly, turn your trunk to the left and reach your arms over your left shoulder, as if you were reaching behind you.
- Bounce your arms a few times.
- Rest and repeat on your other side.
Pelvic Tilt
- Lie down, relax as you breathe in.
- Tighten the muscle of your stomach and buttocks as you breathe out.
- Flatten your lower back against bed.

Head and Shoulder Raising
- Lie down, place your hands behind your head and breathe in.
- Breathe out while you raise your head and shoulders as far as you can.
- Feel your stomach muscles tighten.
- You don’t have to raise yourself to a sitting position.

IV) Other Methods To Clear Your Lungs
Talk to your doctor, nurse, or physical therapist. Write his/her instructions in the spaces below.

- If you use a nebulizer or breathing machine, ask about using it before or during postural drainage.
  Instructions:

- Breathing in steam from a vaporizer or open pot makes mucus thinner, but steamy air may cause breathing difficulty for some people. Ask what you should do.
  Instructions:

- Clapping or vibrating your chest may help loosen mucus so that it will drain. Your physical therapist may do it for you and may teach a friend or family member to do it for you at home.
  Instructions:

- Drinking large amounts of water helps make mucus thinner. But it can be bad for you if it overworks your heart. Ask your doctor how much water you should drink.
  Instructions:

Important: It is dangerous to use any medicines, sprays, or devices unless your doctor orders them.