

Exercise for Someone with COPD





This “Slim Skinny Reference Guide: Exercise for Someone with COPD” is part of the COPD Foundation’s *Slim Skinny Reference Guide*[®] series which has been taken from the *COPD Big Fat Reference Guide*[®].

To access the complete *COPD Big Fat Reference Guide*[®], visit www.copdbfrg.org.

The mission of the COPD Foundation is to develop and support programs which improve the quality of life through research, education, early diagnosis, and enhanced therapy for persons whose lives are impacted by Chronic Obstructive Pulmonary Disease (COPD).

Exercise for Someone with COPD

We all know we should exercise. But it is easy to find excuses for not exercising. We're too tired.

We don't feel well. We can't find the time.

And many of us just find it too boring!



In addition, if you have COPD* you may think that you can't exercise. You may think it will make you feel too short of breath. Or you may feel that it is not safe for you. You may think it will make your lung disease much worse. But actually, avoiding exercise can make you more unfit. You lose fitness when you stop exercising. The less you do, the less you are able to do.

Benefits of Exercise

What You See and Feel

Helps your heart pump blood and send oxygen to your body	You will have improved use of oxygen
Improves how your blood circulates. Helps with the exchange of oxygen and carbon dioxide	You will become less short of breath
Improves energy level	You will be less tired
Increases muscle strength and endurance	You will be able to do more
Improves sleep	You will be able to sleep more soundly. You will wake up refreshed
Helps your posture. Helps you be able to breathe better	You will use less energy
Makes you aware of your body. You will be able to better know what makes you feel worse	While exercising you will be more aware of what makes your symptoms worse. You will learn how to control them
It's fun! You can relieve stress	It will help you improve your mood. It will help you control anxiety

**COPD is a general name for a group of lung diseases: emphysema (em-fa-see-ma), chronic bronchitis (kron-ick-brawn-kie-tis) and bronchiectasis (brawn key eck tay sis). If you have COPD you have trouble moving air in and out of your lungs because of damage to the airways and/or the air sacs.*

The chart above shows many benefits of exercise. But the most important benefit of exercise for COPD patients is how it can improve shortness of breath. Feeling short of breath can make you limit your daily activities. The less active you are, the less you are actually able to do. But you can learn to coordinate your breathing with

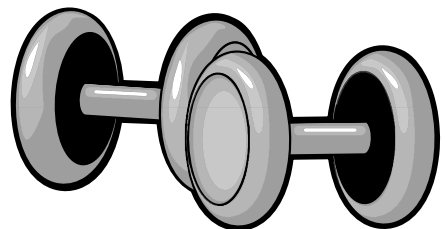
your activities. This will help you use less energy. You will be able to be more active. (See the “Matching Breathing with Effort” section.) For people with moderate to severe COPD, a small amount of exercise can improve how the heart and lungs work.

But First, Talk With Your Doctor

Before you start an exercise program you need to talk about it with your doctor. Your doctor may want you to have an exercise tolerance test. This is done using a treadmill or stationary bike. The test helps decide how much exercise you can do safely. Your heart function and how well oxygen is getting to your body will be measured while you exercise. Your doctor may then give you an “exercise prescription.” This will have details about how hard, how long and how often you should exercise. If you have moderate to severe COPD, your doctor may refer you to a pulmonary (*puhl-mun-nairy*) rehabilitation (*ree-haa-bii-li-tay-shun*) program. (See the side bar at the end of this Guide.)

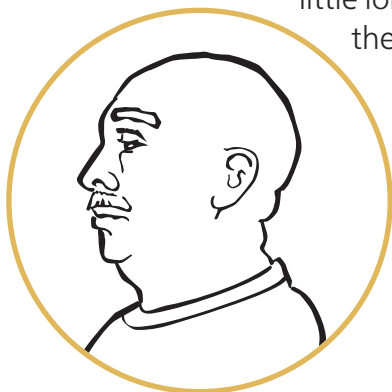
Matching Breathing with Effort

Shortness of breath is one of the main reasons people with COPD think they cannot exercise. Everyone experiences shortness of breath when exercising. But people who do not have COPD are able to adjust their breathing to meet their increased need for oxygen. When you are short of breath, you feel like you cannot get enough oxygen in your lungs. This may make you feel like you need to breathe faster. When you breathe faster, you will be unable to empty your lungs before the next breath. This is what causes the feeling of shortness of breath. For someone with COPD, breathing out for a longer period of time is helpful. This empties your lungs. It prepares you for the next breath.



Matching your breathing to your movements can reduce shortness of breath. It will also help deliver more oxygen to your working muscles. Coordinating or matching your breathing takes effort and practice. Pursed-lip breathing and breathing from your diaphragm (*die-a-fram*) can help you match your breathing with movement. (*Your diaphragm is the muscle that separates the chest cavity from the stomach. The diaphragm is the main muscle we use for breathing. When the diaphragm muscle tightens, the lungs expand.*)

Pursed-lip breathing: In pursed-lip breathing, the lips are almost closed while breathing out. Doing this increases the pressure needed for breathing out. This forces the airways to stay open a little longer. This helps you breathe out more of the air in your lungs. Pursed-lip breathing:



- Reduces your breathing rate
- Keeps your airways open longer
- Improves the exchange of oxygen and carbon dioxide
- Reduces the work of breathing (neck and upper arm muscles are not needed)
- Increases the amount of time you can exercise

To use pursed-lip breathing: Breathe in through the nostrils. Breathe out slowly. Do not force the air out. Breathe out through lips pursed like you would blow out a candle or whistle. Breathe out two to three times longer than you breathe in.

Pursed-lip breathing should be used during and after exercise. It should be used with any activity that makes you feel short of breath.

Breathing from the diaphragm: This type of breathing is also called abdominal (*ab-dah-min-ul*) breathing. Your abdomen should move down when you breathe in. It should rise as you breathe out.

To practice abdominal breathing:

- Place one hand on your abdomen. Place one hand on your upper chest.
- Focus your breathing on your abdomen.
- As you breathe out, the hand on your abdomen should lower.
- As you breathe in, the hand on your abdomen should rise.
- Breathe in through the nose. Breathe out slowly through pursed lips.
- Practice this 2 to 3 times a day for 5 to 10 minutes. Start by doing it while lying on your back. Then try it while sitting. Then try it while standing. Finally, try it while doing an activity.

As you become more comfortable with this type of breathing, you can use it to reduce your feelings of shortness of breath.

You can use it:

- With stair climbing
- With long walks
- After carrying or lifting
- When showering
- With all daily activities
- When exercising

For more information on how changing your breathing can help you with specific activities, see the COPD Foundation's Big Fat Reference Guide®, Chapter 11-B, pages 10-14. This Guide may be found at www.copdbfrg.org.

Starting an Exercise Program

After you've talked with your doctor and after you've learned to use your breathing in a different way, you are ready to consider an exercise program. Getting started can actually be the hardest part.

Let's work through the excuses you may be using to avoid starting an exercise program.

- **You may think you are "too tired."** Exercise can actually help you feel less tired and give you more energy.
- **You may think you are too busy.** Think about all the things you do in a day. How much time do you spend on each of these things? How many of these activities are more important than your health? To start, you only need to find 20 minutes in a day. (Over time you can increase to 30, 45, or 60 minutes.)
- **You may think you are too sick to exercise.** Ask your doctor to create a program that is right for you. The right exercises can actually help you feel better and less sick.

To start a program, consider what you like to do. Exercise is easier if it is fun for you. Consider asking a friend or family member to join you.

You may feel short of breath when doing your daily activities. If you do, you will need to begin your exercise program slowly. Your program should be supervised.

If you are fairly active you can create a program that will improve your strength. You can create a program that will improve your ability to be active for longer periods.

Start by making personal goals. Think about these questions:

Do you want to decrease your feelings of being short of breath during your daily activities?

Choose An Exercise You Enjoy:

- *Take a class with others*
- *Follow a video in your own home*
- *Work out in a gym with a trainer*
- *Walk outdoors*
- *Swim*
- *Dance*
- *Bike*

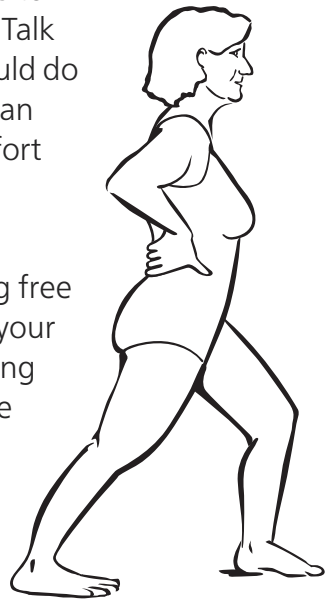
Do you want to have energy to join in family, social or professional activities?

What specific activities do you want to be able to do again?

What is a Good Exercise Program?

An exercise program should have:

- **Warm up and stretching:** This will prepare you for the exercise. It will also help prevent injury. Stretching helps you improve the types of movements you are able to do. This is called your flexibility. You should stretch 5 times a week at least. You should stretch to the point of mild discomfort. Breathe in while you stretch. Breathe out while you hold the stretch. Hold each stretch for 10 to 30 seconds. Repeat each stretch 3 to 5 times.
- **Cardiovascular** (*car-dee-oh-vas-cue-ler*) **exercise:** This increases your blood circulation. It also improves your lung and heart function. There are many ways to do this type of exercise. You can ride a bike, walk on a treadmill or take a walk. You should do this type of exercise once a day, 3 to 5 times per week. You should try to progress to doing this for 20 or 30 minutes at a time. (Talk with your doctor about how long you should do this type of exercise). Warm-up first. You can do this by doing the exercise at a lower effort for 3 minutes. You should also cool down after the exercise, for 3 minutes.
- **Muscle strengthening:** This is done using free weights or resistive bands. It will improve your ability to work without getting tired. Making your muscles stronger will help you be able to perform more tasks. Stronger muscles will help you be more active with less effort. There are muscle strengthening exercises for the upper body and lower body. Building up the large muscles of



the lower body will decrease your feelings of shortness of breath. Strengthening the exercises of the arms and shoulders will help you improve how you do activities using these muscles. These activities may include dressing, showering or housework. You should do this type of exercise 3 times a week. Do each strength exercise 10 times. Try to move to doing each exercise 20 times.

To get the most benefit, you should exercise on a regular schedule. You will receive the most benefit from doing a moderate amount of activity on most, if not all, days of the week. But you will still have some benefit if you only exercise three times per week.

**For more information about the parts of an exercise program see Chapter 11-B of the Big Fat Reference Guide® (www.copdbfrg.org).*

How Will I Know if I Am Exercising Enough or Even Too Much?

Exercising at a moderate level will help you increase your endurance. This means it will help you be able to be more and more active. Moderate exercise also helps improve how your lungs work.

The “Borg Scale of Perceived Exertion with Exercise” can help you decide if you are exercising at a moderate level. “Perceived Exertion” means: how hard you think you are exercising. This scale can help you decide how well you are exercising. It can also help you stay at a moderate level of activity.

You do not need any special skills or equipment to use the Borg Scale. Using the scale allows you to check on how you are doing without stopping to check your pulse rate.

When you are exercising, try to estimate how hard you think you are working. Don’t think about any one factor such as leg pain or shortness of breath. Focus on your inner feeling of effort. Rate your effort as honestly as you can.

Borg Scale of Perceived Exertion

0	Nothing at all
0.5	Very, very weak
1	Very weak
2	Weak (light)
3	Moderate
4	Somewhat strong
5	Strong (heavy)
6	
7	Very strong
8	
9	
10	Maximal (the most you can work)

Your goal should be to exercise at a 3 or 4 level on the scale. You may feel that you cannot adjust your breathing. You may feel too short of breath. Or you may have aches that last longer than 20 or 30 minutes after exercising. If you feel any of these, reduce your exercise level to a 1 or 2 on the scale.

When should I not exercise? When you are seriously ill, a very low level of activity is best. This may include sitting in a chair and minimal walking. When you have recently been in the hospital, you will need to be supervised during light walking and light weight training. When you are having unusual symptoms, lower your exercise level. Talk with your doctor.

Yes, Safe to Exercise

I feel tired	I feel nauseated
I feel shaky	I am having leg pain that I cannot explain
I have a headache	I am having chest pain
I am coming down from a steroid burst	I am out of oxygen
I am too busy	I have a fever or strep throat
I am bored and feeling lazy	
I am having a bad day	

No: Not safe to Exercise



When should oxygen be used? If you are currently on oxygen, you will need to exercise with it. Your doctor will need to prescribe an oxygen “flow rate” for activity. This flow rate will be different from the flow rate you use while resting. You will need to adjust your flow rate for about five minutes before you begin exercising. If your exercise is too intense for you, your oxygen prescription may need to be changed. Or you may just need to slow down. Do not adjust your oxygen without talking with your doctor.

Record Your Success and Have Fun

Many people find it helpful to keep a record of their exercise. You can record when you exercised, how long and how hard. As you improve, these records may encourage you to continue.

You may also want to consider if you prefer to exercise alone or in a group. Some hospital’s have support groups for people with lung disease. They may allow you to exercise together in a supervised setting. Mall and rec centers also have walking clubs and group classes. Exercising with others can be motivating.

Finding an exercise program you can stick with can be hard. The key to success is finding something that is fun for you. And don’t forget to reward yourself when you reach small goals. These small goals are the steps to reaching your larger goals.

The information in this Guide is not meant to replace a medical evaluation or information from your doctor. You should ALWAYS talk with your doctor about any exercise program before you start it. Your doctor can help you know how much and how often you should exercise.

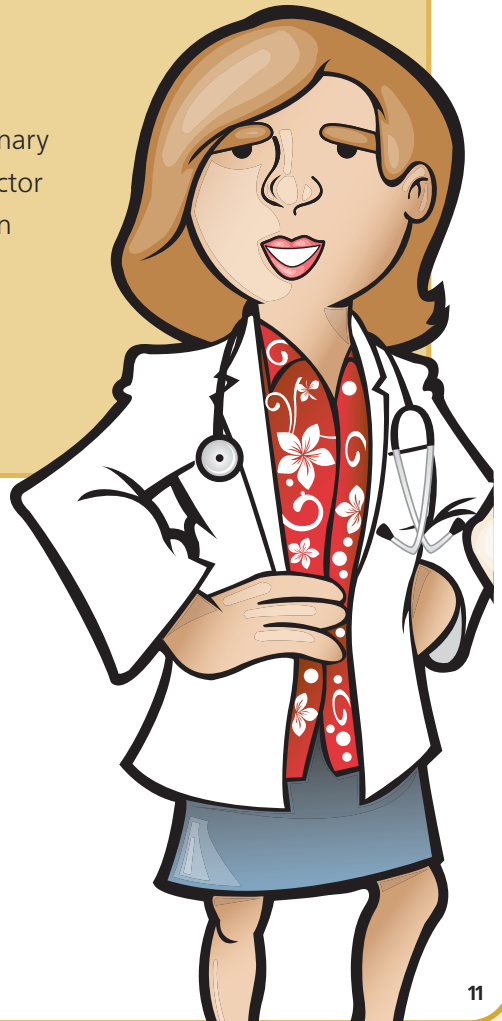
Pulmonary (*puhl-mun-nairy*)

Rehabilitation (*ree-haa-bii-lit-ay-shun*)

A pulmonary rehabilitation program is good for someone with COPD who has not regularly exercised. It is also good for someone who cannot do daily living activities without getting tired and short of breath. These programs use a team approach to help you reach goals. The team helps you improve your quality of life. The team includes:

- Doctors
- Nurses
- Physical therapists
- Counselors
- Exercise therapists
- And more.

Some insurers will not pay for pulmonary rehab. If you are denied, ask your doctor to send them a letter. Your doctor can explain to your insurance company why you need the program.



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