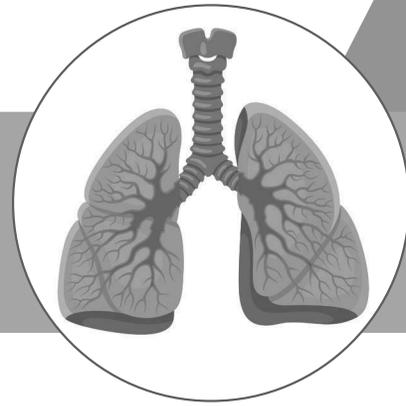


# BREATHE IN, BREATHE OUT, REPEAT: COPD and Oxygen Therapy



## A COMPLICATED ARRANGEMENT

Breathing is normally so easy that you may not even think about it. Your lungs were designed to work almost automatically, but they are very complicated life-sustainers. When you breathe in, air is sucked into your lungs through breathing tubes, called "bronchi." The breathing tubes get smaller and smaller and end in air sacs, "alveoli." These sacs end in tiny blood vessels with thin walls, so that oxygen passes right through them into your blood. A gas called carbon dioxide, one of the body's waste products, comes out of your blood when you breathe out.

## THINGS TO REPORT

Your amazing breathing system normally works well. But if you begin to have any of the following symptoms, you need to see your Primary Care Physician (PCP) right away:



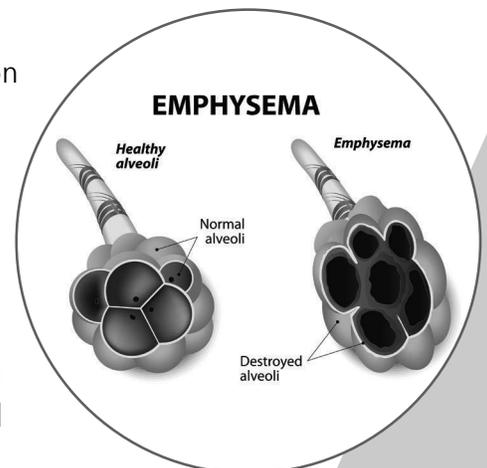
- chronic cough
- shortness of breath during everyday activities
- frequent respiratory infections (colds, pneumonia)
- feeling tired or fatigued
- producing a lot of mucus
- wheezing
- slight blueness of lips or fingernail beds

These symptoms may mean you have Chronic Obstructive Pulmonary Disease (COPD). If you think you might have COPD, it's important to get diagnosed and start treatment as soon as you can, to slow down damage to your lungs.

## WHAT'S GOING ON IN THERE?

Breathing in gases and particles like those in cigarette smoke or air pollution irritates your lungs. With continued exposure (such as by smoking), the irritation becomes chronic and causes lung scarring. Then your lungs don't work as well, so it's harder for oxygen to pass through the walls of the tiny blood vessels. The alveoli become stiffer and less able to recoil when you breathe out, so that getting rid of carbon dioxide becomes harder. This is a type of COPD called "emphysema."

When your airways are often inflamed, they produce extra mucus to try and get rid of irritants. Bronchitis develops and if it's long-lasting it's considered chronic bronchitis, another type of COPD.





## OXYGEN TO THE RESCUE!

Supplemental oxygen can help a person with COPD feel better by raising oxygen levels in the blood and easing shortness of breath. To decide whether you might benefit from supplemental oxygen, your doctor can order a blood draw to measure the amount of oxygen in your arterial blood. Another way of testing is to use a pulse oximeter that indirectly measures oxygen levels without needing a blood sample.

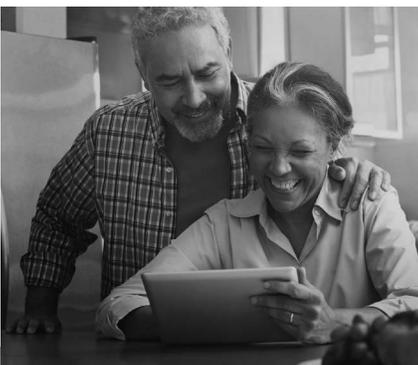
Like medicine, your doctor has to prescribe oxygen, and will send the prescription to a durable medical equipment (DME) company. They will provide home oxygen therapy and equipment. Medicare (and Optimum HealthCare, your Medicare health plan) covers oxygen in the home. You will pay only coinsurance. There are several different oxygen systems available; your PCP and the DME company can help you figure out what's best for you.

Home oxygen is usually delivered through a nasal cannula, plastic tubing which loops over the ears and is held in place with small prongs which fit in the nose. Most people have an oxygen concentrator at home, a device that can actually turn the surrounding air into oxygen! It compresses the air, purifies it, removes the nitrogen and delivers it to you. There are also home oxygen tanks of various sizes.

### STAY ALERT!

Even though oxygen can help you feel better, there are some safety tips to keep in mind.

- oxygen increases fire risk. Never smoke or have an open flame in a room where you or someone else is using oxygen.
- make sure you have smoke detectors throughout the house.
- keep fire extinguishers handy.
- keep oxygen away from the stove, oven, flames and lighted tobacco products.
- be aware of oxygen tubing to avoid tripping and falling.
- store oxygen tanks upright, and where air can move freely around them. Make sure the flow is shut off whenever you're not using it.
- don't use flammable products around oxygen (paint thinner, aerosol sprays).



For many people with COPD, oxygen therapy can decrease breathlessness and fatigue. It may make you feel more alert and even help you sleep better. Ask your PCP if oxygen is an option for you.

Most important, see your PCP if you think you're having symptoms of COPD but haven't been diagnosed. The proper treatment can ease symptoms and help you live your healthiest life.