

The Complete **GUIDE** TO **COPD**



Introduction

Breathing is a task that we tend to take for granted. We inhale and exhale without even thinking about it. However, for many Americans, it can be extremely difficult. One condition that makes it hard to breathe is COPD.

COPD stands for chronic obstructive pulmonary disease. This disease is the 4th leading cause of death in the United States and it affects over 16 million Americans. And these are only the diagnosed cases. Many Americans may have COPD and not even realize it. In this guide, we will outline the symptoms of COPD along with tips for managing the symptoms to help you or a loved one maintain a high quality of life.

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What Is COPD?

COPD, chronic obstructive pulmonary disease, is a broad term used to describe progressive lung diseases: emphysema, chronic bronchitis, and refractory asthma. These diseases impact your lung performance.

In a healthy lung, you breathe in air, which travels through your windpipe and into your lungs. The windpipe splits into several different branches, and those branches split into more branches. The airways eventually end in tiny air sacs, called alveoli.

When you breathe in, these little sacs expand. When you breathe out, they contract. They have high elasticity, meaning they can bounce back to their original shape very easily. However, COPD impacts this usually smooth process, making breathing a laborious task.

Let's consider each form of COPD and how they affect the breathing process.

Emphysema

Emphysema is a long-term lung disease that causes shortness of breath. It damages the walls between the lungs' air sacs. As the walls break down, the air sacs grow bigger and lose their shape. When these sacs are damaged, their movement becomes limited or even stops. This affects the exchange the air in your lungs, making it harder for you to get the oxygen you need.

Picture emphysema like a sponge. A healthy lung looks like a new sponge out of the package. A lung with emphysema resembles a sponge that you've been using for too long with large holes and a lack of elasticity. Emphysema destroys the elastic function of the tissue in the lungs and can also severely impact the blood vessels in the lungs, reducing the amount of oxygen that gets into your bloodstream.



Chronic Bronchitis

Chronic bronchitis involves the blocking of the airways in your lungs because of inflammation. This inflammation makes it hard to breathe and causes irritation, discomfort, wheezing, cough, and mucus production.

This condition is not curable, unlike acute bronchitis. Acute bronchitis can come after a cold or respiratory infection and goes away in a short amount of time. Chronic bronchitis, however, is a long-term disease. Individuals diagnosed with chronic bronchitis may feel better or worse at times, but the condition is always present.

Refractory Asthma

Refractory asthma occurs when individuals have persistent asthma symptoms, like difficulty breathing, asthma attacks, or low lung function. This condition involves constricted and inflamed airways, which make it difficult to breath. Additionally, the body produces extra mucus as a reaction to the swollen airways. This type of asthma is classified as refractory because treatments and therapy can't manage the symptoms.

What Causes COPD?

COPD is primarily caused by irritation in the lungs. In the United States, smoking is the cause of 90% of COPD cases. However, individuals may also develop COPD if they are exposed to lung irritants for a long period of time. These irritants may include smoke from fires, secondhand smoke, chemical fumes, indoor air pollution, or dust.

In addition to external irritants, there is a genetic component to COPD. Some individuals have genes that put them at higher risk for developing COPD, even if they do not smoke. For example, some people may have stunted lung growth, which puts them at a higher risk for developing COPD.

People who already have asthma are at higher risk for COPD as well. Around 20% of those diagnosed with COPD also have asthma, a condition referred to as asthma-COPD overlap syndrome, or ACOS.

Gender and age also play a role in this disease. Women are more likely to develop COPD than men. And the disease is commonly diagnosed after 45.

What Are the Symptoms of COPD?

It's important to note the common symptoms of COPD because most individuals believe that their age and their difficulty breathing just go hand in hand. An early diagnosis is crucial to managing symptoms and preventing further damage.

Here are some common symptoms:

- Mucus production
- Fatigue
- Chronic cough
- Wheezing
- Difficulty breathing or catching your breath
- Repeat respiratory infections
- Blue lips or fingernail beds
- Chest tightness

If you experience some of these symptoms, we recommend seeking medical advice. A health care provider can diagnose COPD based on your symptoms, breathing tests, chest x-rays, or other tests.

COPD Stages

For individuals with COPD, the symptoms listed above will progress and increase in severity. This progression is classified in 3 stages: mild, moderate, and severe.

MILD

During the mild stage, symptoms do not interfere with independence or quality of life. You might feel short of breath more than usual or cough up some mucus in the morning.

MODERATE

During the moderate stage, COPD sufferers may find it more difficult to perform daily tasks due to fatigue or shortness of breath. It might be harder to work in the garden or carry groceries without getting tired. Or you might have a frequent cough.

SEVERE

However, during the severe stage, COPD sufferers will experience symptoms continuously throughout the day and are at the highest risk for COPD-related complications. In the severe stage, you might have difficulty walking up the stairs or across the room.

Additionally, those affected in any stage of COPD may experience flare-ups, periods of time when symptoms get significantly worse. These flare-ups can be deadly if not treated because they can damage the lungs and prevent your body from expelling carbon dioxide properly, resulting in a buildup.

Pay attention to your symptoms and take note if they get worse. If you think you are experiencing a flare-up, seek medical care immediately.

What Treatments Are Available for COPD?



As previously mentioned, there is no cure for COPD. Symptoms may worsen or improve, but the condition will never go away completely. However, there are medical treatments available that can help manage the symptoms.

BRONCHODILATOR

A bronchodilator helps widen the bronchi by relaxing the muscles that tighten around the airways. This treatment helps improve breathing and is often administered in an inhaler.

STEROIDS

Steroids or corticosteroids are anti-inflammatories that can help reduce swelling in the airways. They can also help reduce mucus production to help you breathe better. These medications can be prescribed in a pill or in an inhaler.

ANTIBIOTICS

Because bacterial or viral infections can be so dangerous for people with COPD, your doctor may prescribe an antibiotic. These can help prevent or get rid of infections.

OXYGEN THERAPY

Oxygen therapy is one of the oldest treatments for COPD. This treatment provides the body with additional oxygen through oxygen tanks, liquid oxygen systems, or oxygen concentrators. However, COPD doesn't always indicate low oxygen levels, so this treatment may not be the most effective solution.

What Treatments Are Available for COPD?

PULMONARY REHAB

Pulmonary rehab is a program that trains people with COPD on different breathing techniques, proper diet, and mental effects of COPD. The program provides exercise and education to help individuals manage their symptoms.

SURGERY

Surgery may be an option for some individuals with COPD, but it is typically reserved for those in end-stage COPD who don't respond to other forms of treatment. These surgeries can include the following:

Bullectomy: This procedure removes dilated air spaces in the lungs, called bullae, to help increase efficiency in the lungs.

Lung Volume Reduction: This surgery involves removing damaged pieces of the lungs to improve airflow.

Lung Transplant: Sometimes, a complete lung transplant is the best option to improve breathing.

How to Manage COPD at Home



In addition to medical treatment, there are many things that people with COPD can do at home to maintain their quality of life and reduce symptoms.

QUIT SMOKING

Because 90% of COPD cases are caused by smoking in the US, it's crucial that COPD sufferers quit smoking immediately. While it's an extremely difficult habit to break, it is possible. Quitting can help reduce further lung damage so you can manage your symptoms more effectively.

There are many ways to approach quitting, including:

- Support groups
- Counseling
- Medication
- Nicotine gum, lozenges, patches, or sprays

VACCINES

Getting a flu shot every year can help reduce your risk of developing the flu, which can be a very serious illness for those with COPD. The flu can lead to pneumonia or even death. You may also want to consider vaccinations to protect you from other illnesses or bacteria that can lead to pneumonia.

AIR QUALITY

Air quality is a major trigger for COPD symptoms. Air can contain toxins or irritants that can exacerbate COPD. Ensure that your home has high-quality air filters. Consider removing carpets, which contain small fibers that can be irritating to the lungs.

How to Manage COPD at Home

EATING HABITS

While it may seem strange, eating smaller meals can actually help people manage shortness of breath. When people with COPD overeat, they often experience shortness of breath. But if your meals are smaller and spaced out during the day, you can avoid that full feeling.

EXERCISE

Try to get in shape. This doesn't necessarily mean losing weight, although it can. You want to make sure you are getting proper nutrients and giving your heart and lungs the workout needed to supply your body with oxygen.

HUMIDITY

Consider adding a humidifier to your home, especially during dry winter months. The extra moisture in the air can help soothe irritated lung tissue. Just make sure to keep the humidifier clean to avoid accidentally pumping more irritants into the air.

HOME CARE

Having a professional caregiver in the home can help with managing COPD as well. Caregivers can keep track of treatment schedules and doctor's appointments. They can help identify changes in symptoms and watch for mood or personality changes. Additionally, caregivers can help perform tasks that may be difficult for those with COPD.

At Caring Senior Service, we have a COPD-specific care program designed to meet the needs and preferences of seniors with COPD. Our caregivers receive training to identify symptoms and flare-ups to provide efficient care. For more information on caring for those with COPD, reach out to our team!

Resources

<https://www.ageinginplace.org/copd/>

https://www.emedicinehealth.com/emphysema/article_em.htm#what_causes_emphysema

<https://www.mayoclinic.org/diseases-conditions/emphysema/symptoms-causes/syc-20355555>

<https://www.lung.org/lung-health-and-diseases/lung-disease-lookup/chronic-bronchitis/>

<https://lungfoundation.com.au/wp-content/uploads/2018/09/Book-COPD-The-Basics-Sep2018.pdf>



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