

How Is COPD Diagnosed and Treated?



COPD

Your doctor will diagnose COPD based on your signs and symptoms, your medical and family histories, and test results.

Your doctor may ask whether you smoke or have had contact with lung irritants, such as secondhand smoke, air pollution, chemical fumes, or dust.

If you have an ongoing cough, let your doctor know how long you've had it, how much you cough, and how much mucus comes up when you cough. Also, let your doctor know whether you have a family history of COPD.

Your doctor will examine you and use a stethoscope to listen for wheezing or other abnormal chest sounds. He or she also may recommend one or more tests to diagnose COPD.

Lung Function Tests

Lung function tests measure how much air you can breathe in and out, how fast you can breathe air out, and how well your lungs deliver oxygen to your blood.

The main test for COPD is spirometry (spi-ROM-eh-tre). Other lung function tests, such as a lung diffusion capacity test, also might be used.

Spirometry

During this painless test, a technician will ask you to take a deep breath in. Then, you'll blow as hard as you can into a tube connected to a small machine. The machine is called a spirometer.

The machine measures how much air you breathe out. It also measures how fast you can blow air out.

Spirometry

The image shows how spirometry is done. The patient takes a deep breath and then blows hard into a tube connected to a spirometer. The spirometer measures the amount of air breathed out. It also measures how fast the air is blown out.

Your doctor may have you inhale medicine that helps open your airways and then blow into the tube again. He or she can then compare your test results before and after taking the medicine.

Spirometry can detect COPD before symptoms develop. Your doctor also might use the test results to find out how severe your COPD is and to help set your treatment goals.

The test results also may help find out whether another condition, such as asthma or heart failure, is causing your symptoms.

Other Tests

Your doctor may recommend other tests, such as:

- A chest x-ray or chest CT scan. These tests create pictures of the structures inside your chest, such as your heart, lungs, and blood vessels. The pictures can show signs of COPD. They also may show whether another condition, such as heart failure, is causing your symptoms

- An arterial blood gas test. This blood test measures the oxygen level in your blood using a sample of blood taken from an artery. The results from this test can show how severe your COPD is and whether you need oxygen therapy.

How Is COPD Treated?

COPD has no cure yet. However, lifestyle changes and treatments can help you feel better, stay more active, and slow the progress of the disease.

The goals of COPD treatment include:

- Relieving your symptoms
- Slowing the progress of the disease
- Improving your exercise tolerance (your ability to stay active)
- Preventing and treating complications
- Improving your overall health

To assist with your treatment, your family doctor may advise you to see a pulmonologist. This is a doctor who specializes in treating lung disorders.

Lifestyle Changes

Quit Smoking and Avoid Lung Irritants

Quitting smoking is the most important step you can take to treat COPD. Talk with your doctor about programs and products that can help you quit.

If you have trouble quitting smoking on your own, consider joining a support group. Many hospitals, workplaces, and community groups offer classes to help people quit smoking. Ask your family members and friends to support you in your efforts to quit.

Also, try to avoid secondhand smoke and places with dust, fumes, or other toxic substances that you may inhale.

Medicines

Bronchodilators

Bronchodilators relax the muscles around your airways. This helps open your airways and makes breathing easier.

Depending on the severity of your COPD, your doctor may prescribe short-acting or long-acting bronchodilators. Short-acting bronchodilators last about 4–6 hours and should be used only when needed. Long-acting bronchodilators last about 12 hours or more and are used every day.

Most bronchodilators are taken using a device called an inhaler. This device allows the medicine to go straight to your lungs. Not all inhalers are used the same way. Ask your health care team to show you the correct way to use your inhaler.

If your COPD is mild, your doctor may only prescribe a short-acting inhaled bronchodilator. In this case, you may use the medicine only when symptoms occur.

If your COPD is moderate or severe, your doctor may prescribe regular treatment with short- and long-acting bronchodilators.

Combination Bronchodilators Plus Inhaled Glucocorticosteroids (Steroids)

If your COPD is more severe, or if your symptoms flare up often, your doctor may prescribe a combination of medicines that includes a bronchodilator and an inhaled steroid. Steroids help reduce airway inflammation.

In general, using inhaled steroids alone is not a preferred treatment.

Your doctor may ask you to try inhaled steroids with the bronchodilator for a trial period of 6 weeks to 3 months to see whether the addition of the steroid helps relieve your breathing problems.

Vaccines

Flu Shots

The flu (influenza) can cause serious problems for people who have COPD. Flu shots can reduce your risk of getting the flu. Talk with your doctor about getting a yearly flu shot.

Pneumococcal Vaccine

This vaccine lowers your risk for pneumococcal pneumonia (NU-mo-KOK-al nu-MO-ne-ah) and its complications. People who have COPD are at higher risk for pneumonia than people who don't have COPD. Talk with your doctor about whether you should get this vaccine.

Pulmonary Rehabilitation

Pulmonary rehabilitation (rehab) is a broad program that helps improve the well-being of people who have chronic (ongoing) breathing problems.

Rehab may include an exercise program, disease management training, and nutritional and psychological counseling. The program's goal is to help you stay active and carry out your daily activities.

Your rehab team may include doctors, nurses, physical therapists, respiratory therapists, exercise specialists, and dietitians. These health professionals will create a program that meets your needs.

Oxygen Therapy

If you have severe COPD and low levels of oxygen in your blood, oxygen therapy can help you breathe better. For this treatment, you're given oxygen through nasal prongs or a mask.

You may need extra oxygen all the time or only at certain times. For some people who have severe COPD, using extra oxygen for most of the day can help them:

- Do tasks or activities, while having fewer symptoms
- Protect their hearts and other organs from damage
- Sleep more during the night and improve alertness during the day
- Live longer

Surgery

Surgery may benefit some people who have COPD. Surgery usually is a last resort for people who have severe symptoms that have not improved from taking medicines.

Surgeries for people who have COPD that's mainly related to emphysema include bullectomy (bul-EK-toe-me) and lung volume reduction surgery (LVRS). A lung transplant might be an option for people who have very severe COPD.