

Chronic Obstructive Pulmonary Disease (COPD)



This illness is a chronic inflammatory disease that causes airflow in the lungs to be blocked. Typically, this disease progresses with long-term exposure to irritating gases or particulate matter, The most common being cigarette smoke (either from smoking or from continuous exposure to a smoker).

Most Common Conditions of COPD

- Chronic bronchitis: inflammation of the bronchial tubes that causes coughing and a lot of mucus.
- Pulmonary emphysema: Damage to the tissues (alveoli and bronchioles) of the lungs.

Signs and Symptoms

- Shortness of breath
- Cough
- Fatigue
- Mucus (sputum) production
- Wheezing (labored breathing with a sound in the chest)
- Tightness in the chest
- Frequent respiratory infections

Diagnosis

To diagnose COPD, a series of tests are done, including:

- **Pulmonary function test** (spirometry): This measures the amount of air that reaches the lungs and blood. You will need to inhale and exhale using a machine that measures your lung capacity.
- **X-rays:** These can identify lung problems or heart failure.
- **CT Scan:** can identify emphysema and lung cancer, and the results can determine if surgery is necessary to treat the condition.



- **Blood tests:** Measures the amount of oxygen and carbon dioxide in the blood, as well as detecting deficiency of alpha-1 antitrypsin (ATT), which is a protein that protects the lung.

Treatment

Although COPD is a chronic, progressive disease, with proper treatment, most people can control their symptoms and have a better quality of life.



- Medicines to open the airways, decrease inflammation in the lungs, and relieve certain symptoms.
- Short-acting medications are known as rescue medications.
- Long-acting medications control or prevent symptoms; these are known as maintenance medications.
- Antibiotics, anti-inflammatory drugs, or bronchodilators.
- Use extra oxygen with the assistance of a machine.
- Staying away from cigarette smoke is the most important step in preventing COPD from getting worse.

- If none of the medications are beneficial, surgery may be needed. Your doctor may recommend a lung reduction (removing the damaged part), a bullectomy (removing air pockets built up inside the lung), or a lung transplant (replacing the lung with a donor lung).

Complications

COPD can cause other health problems such as an irregular heartbeat (arrhythmias), heart failure, pneumonia, collapsed lungs, heavyweight loss, osteoporosis, weakness, and anxiety.

COPD Prevention and Management Measures

- Quit smoking with the help of nicotine replacements, medications, and support groups.
- Avoid places where others smoke. Secondhand smoke can also contribute to the development of COPD.
- Practice proper breathing techniques with your doctor or respiratory therapist during the day.
- Avoid places where the air is polluted.
- Drinking plenty of water and using a humidifier can help clear your airways and clear mucus that tends to build up.
- Exercising regularly can improve overall endurance and strengthen respiratory muscles. Talk to your doctor about the type of physical activity that's right for you.
- Eating healthy, adding nutritional supplements (if needed), and weight loss can make breathing easier.



- Don't miss your appointments, even if you feel fine. Ask your doctor if you should get vaccinated against seasonal viruses.
- If you feel shortness of breath, dizziness, or chest pain, contact the 9-1-1 or visit the nearest emergency room.

Social and Emotional Aspect

For recommendations, tools, and resources on how you and your family can cope with emotional and physical concerns that arise during your treatment, please visit your primary care physician or contact the following phone lines:

Medical Advice Line

1-844-347-7801

TTY/TDD

1-844-347-7805

APS Health

787-641-9133

References:

<https://www.mayoclinic.org/es/diseases-conditions/copd/symptoms-causes/syc-20353679>

[https://www.who.int/es/news-room/fact-sheets/detail/chronic-obstructive-pulmonary-disease-\(copd\)](https://www.who.int/es/news-room/fact-sheets/detail/chronic-obstructive-pulmonary-disease-(copd))

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