



Chronic Obstructive Pulmonary Disease (COPD)

In regards to chronic obstructive pulmonary disease (COPD), one specific health behavior is tied to this condition – tobacco use. Utilization of an form of tobacco use has been identified as the cause of COPD and has been noted as a major component for complications. COPD is a term referring to two lung diseases, chronic bronchitis and emphysema. Both are characterized by obstruction to airflow that interferes with normal breathing. Both of these conditions frequently co-exist, hence physicians prefer the term COPD. It does not include other obstructive diseases such as asthma. COPD is the third leading cause of death in the United States. In 2007, 124477 people died as a result of COPD.

Primary Risk Factor

Smoking is the primary risk factor for COPD. Approximately 85 to 90 percent of COPD deaths are caused by smoking. Female smokers are nearly 13 times as likely to die from COPD as women who have never smoked. Male smokers are nearly 12 times as likely to die from COPD as men who have never smoked. Any current or former smoker over age 40 or non-user with a family history of COPD, emphysema or chronic bronchitis, those with exposure to occupational or environmental pollutants and those with a chronic cough, sputum (matter discharged from air passages) production or breathlessness, should seek testing for COPD with spirometry.

Other risk factors of COPD include exposure to air pollution, second-hand smoke, occupational dusts, chemicals, heredity, a history of childhood respiratory infections and socioeconomic status. Particulate matter from cigarette smoke and air pollution, including smoke from poorly ventilated wood stoves are related to lung damage.



Conditions that lead to COPD

Chronic Bronchitis is the inflammation and eventual scarring of the lining of the bronchial tubes. When the bronchi are inflamed and/or infected, less air is able to flow to and from the lungs and a heavy mucus or phlegm is coughed up. The condition is defined by the presence of a mucus-producing cough most days of the month, three months of a year for two successive years without other underlying disease to explain the cough.

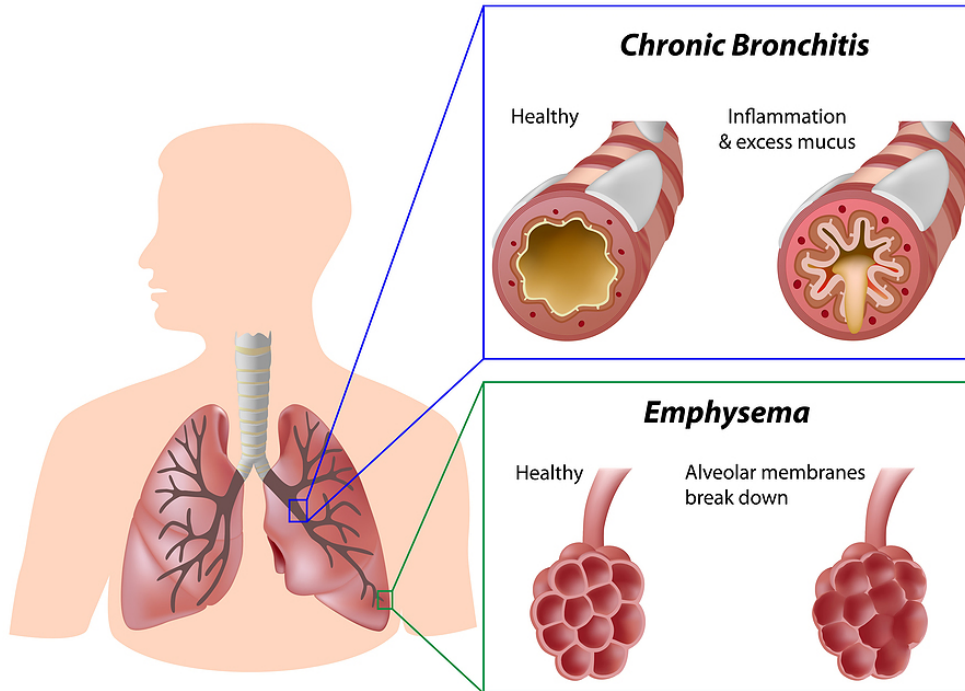
This inflammation eventually leads to scarring of the lining of the bronchial tubes. Once the bronchial tubes have been irritated over a long period of time, excessive mucus is produced constantly, the bronchial tubes lining thickens, an irritating cough develops, air flow may be hampered, and the lungs become scarred. The bronchial tubes then make an ideal breeding place for bacterial infections within the airways, which impede airflow.

Emphysema begins with the destruction of the air sacs (alveoli) in the lungs where oxygen from the air is exchanged for carbon dioxide in the blood. The walls of the air sacs is irreversible and results in permanent “holes” in the tissues of the lower lungs. As air sacs are destroyed, the lungs are able to transfer less and less oxygen to the bloodstream, causing shortness of breath. The lungs also lose their elasticity, which is important to keep airways open. The patient experiences great difficulty exhaling.

Emphysema does not develop suddenly. It comes on gradually after years of exposure to an airway irritant, such as cigarette smoke, usually precede the development of emphysema. Of the estimated 3.7 million Americans ever diagnosed with emphysema, 94 percent are 45 or older.



Chronic Obstructive Pulmonary Disease (COPD)



What treatments are available?

Smoking cessation is the single most effective and cost effective intervention to reduce the risk of developing COPD and slow its progression. See your primary care manager for prescription drugs that can relax and open air passages in the lungs.