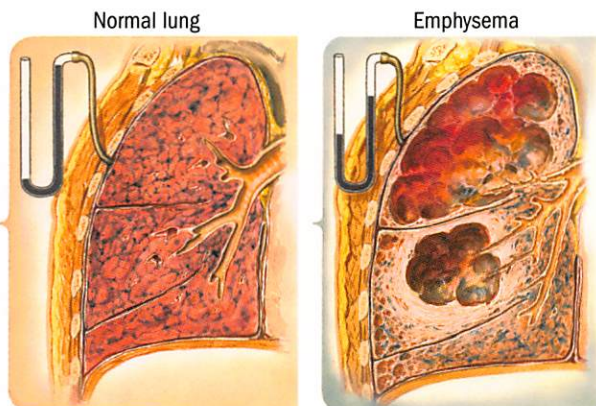


# MANAGING YOUR EMPHYSEMA



The lung in emphysema

## What Is Emphysema?

Emphysema is a chronic disease of the lungs. It causes decreased lung function and swelling (inflammation) and irritation of airways. Emphysema often occurs with chronic bronchitis (these two conditions are called *chronic obstructive pulmonary disease*, or COPD).

The lungs consist of two main parts: airways (bronchial tubes) and air sacs (alveoli). During a breath, air passes through airways and into air sacs, where oxygen enters the blood. In emphysema, air sacs become larger, their walls become stiff, and the sacs cannot hold enough air.

## What Causes Emphysema?

The main cause is cigarette smoking or exposure to second-hand smoke. Cigarette smoke destroys lung tissue and irritates airways.

Other risk factors include asthma, air pollution, and family history of emphysema.

## What Are the Symptoms of Emphysema?

The main symptom is shortness of breath. Others are persistent cough, wheezing, decreased ability to exercise or do usual daily activities, and weight loss.

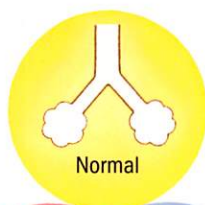
## How Is Emphysema Diagnosed?

The doctor will talk about your symptoms with you and do a physical examination, especially of the chest. He or she will listen to the lungs with a stethoscope to see whether breathing is normal.

A monitor (pulse oximeter) may be used to measure the blood's oxygen level.

Simple blood tests check general health. Some people may need blood tests for levels of oxygen and carbon dioxide in an artery or for alpha-1-antitrypsin enzyme deficiency, a risk factor for emphysema.

A chest x-ray will be done to look at the lungs. Lung function testing (spirometry) may be done to tell whether the disease is emphysema or another lung disorder (e.g., asthma). The testing involves blowing into a tool to measure how much and how fast the lungs blow out air.



Chronic obstructive pulmonary disease (COPD): relation between emphysema and chronic bronchitis

Chronic bronchitis

Mixed

Emphysema



Cigarette smoking is the most important cause.

The main symptom is shortness of breath.



Blood tests and spirometry are used for diagnosis.

