



TESTS AND DIAGNOSIS

Your health-care provider will conduct a thorough physical exam and listen to your heart and lungs. He or she will observe your breathing, both at rest and after minimal activity (such as walking into the room). You will also be asked questions about your medical history.

Some tests that might be used to further evaluate your breathing and health include:

Breathing tests (also called pulmonary functions tests, PFTs, or spirometry). This pain-free test measures your lung function using a device called a *spirometer*. You breathe out into a mouthpiece, and the spirometer measures the amount of air and the speed of air you blow out.

Chest x-ray. A chest x-ray produces a picture of your heart and lungs. It can be used to rule out other lung problems and can detect some lung characteristics common to COPD. A chest x-ray alone can't diagnose COPD, but it can offer your health-care provider important information.

Oxygen level measurements. Your clinician can measure the level of oxygen in your blood with a simple device called a *pulse oximeter*. A pulse oximeter uses a clamp-shaped sensor that's applied to a fingertip -- don't worry, it's painless. The sensor emits a red-light and indicates the oxygen level in your body. Certain blood tests can also indicate the level of oxygen in your body.

Blood tests. Blood tests can be used to check your oxygen level, to test for alpha1-antitrypsin deficiency (a rare genetic disorder that can cause COPD), and to check for infections.

Mucus (phlegm or sputum) culture. If you're coughing up any "gunk," your health-care provider can send a sample to the lab for analysis. Lab tests can help detect infection and determine treatment.

Exercise tests. An exercise test can help health-care providers understand how your body and breathing react to activity. The test typically takes place at a hospital or clinic, and a health-care provider will measure your breathing, heart activity, and oxygen levels before, during, and after exercise. You will be asked to ride a stationary bike or walk on a treadmill. A clinician will observe the test, which will end before you get too winded or tired.