What is spirometry?

Spirometry is a test used for lung conditions, such as COPD* or asthma. It is a simple breathing test that measures the amount of air a person can blow out of the lungs (volume). It also measures how fast he or she can blow it out (flow). It is one of the best and most common lung function tests. Spirometry is often done in your healthcare provider’s office or in a clinic.

Spirometry can detect COPD before symptoms become severe. Based on this test, your provider can tell if you have COPD and, if so, how severe it is.

What happens during a spirometry test?

The test is done with a machine called a spirometer. It:

- Measures how well your lungs function
- Records the results
- Some show the results on a graph

To take the test, you will be asked to take a deep breath. Next, you will blow out as hard and as fast as you can, using a mouthpiece connected to the machine. The spirometer then measures how much air you breathe out in 1 breath, called the forced vital capacity, or FVC. It also measures how much you exhale in the first second. This is called the forced expiratory volume in 1 second, or FEV₁.

Your provider may ask you to take the test again after you breathe in medicine to help open your airways. Comparing both test results helps tell your provider how well your lungs are working. This also tells your provider whether or not you have COPD.

The test results can also help find the best course of treatment.

Talk with your provider to learn more about spirometry tests.

* COPD means chronic obstructive pulmonary disease. It includes chronic bronchitis and emphysema.