



What you need to know about...

Testing and Diagnosing Asthma

If you have wheezing, coughing and shortness of breath, your health care provider might think you have asthma. But these signs and symptoms may not be enough to diagnose asthma because they can also be caused by other conditions. Your health care provider will determine whether you have asthma by performing physical exams, asking you questions about your medical history, and possibly some lung-function tests.

Physical exam

During a physical exam to check for asthma, your health care provider generally will:

- Examine your nose, throat, and upper and lower airways
- Listen to your lungs with a stethoscope to check for wheezing, which is one of the main signs of asthma
- Examine your skin for signs of allergic conditions like eczema

Medical history

You health care provider will ask you about several things, which may include:

- What are your symptoms?
- Do you have hay fever or other allergies?
- Do you have any blood relatives with asthma, allergies or other respiratory diseases?
- What other health problems do you have now or have had in the past?
- What medicines or supplements do you take?

Lung function tests

Although your medical history and physical exam may suggest you have asthma, lung function tests may be needed to confirm an asthma diagnosis.

Spirometry

Using an instrument called a spirometer, your health care provider can help identify if you have asthma, find out how severe it is, and see if your asthma is getting worse or improving with treatment. This is the most accurate breathing test for asthma.

What will I have to do for a spirometry test?

- Stand or sit up straight and blow into a mouthpiece that is connected to the spirometer.
- Blow as hard as you can for as long as you can. The

minimum amount of time is six seconds, if possible. The test will be repeated three times to get the best result.

- You may also be asked to take some puffs from a quick relief or reliever inhaler or possibly to take a breathing treatment through a nebulizer (a small air compressor) and then repeat the test to show whether the medicines have an effect on your airways.

How does my health care provider measure the results of my spirometry test?

Spirometry measures a few things. The forced vital capacity (FVC) is the most amount of air you can breathe in and breathe out. Forced expiratory volume (FEV-1) is the most amount of air you can breathe out in one second. Your health care provider will compare these two measurements, and he or she will compare your results to those of other people your height and age who do not have lung disease. If they are lower than normal for people your same age, your health care provider will explain the possible causes. Often it is asthma or another lung disease.

Exhaled nitric-oxide test

Another test some health care providers use measures how much Nitric Oxide you exhale. Nitric oxide gas is normally made by the body, but high levels of the gas in your breath can mean your airways are inflamed, which is a sign of asthma.

Challenge test

During this test, your health care provider will try to trigger an airway obstruction and asthma symptoms on purpose. He or she may have you inhale a substance that causes airways to constrict (tighten), or you may be asked to do vigorous exercise if you appear to have asthma triggered by exercise. After triggering your symptoms, you will have to retake the spirometry test. If your measurements have fallen significantly, it may mean you have asthma.

