



## DO YOU HAVE ASTHMA OR SEVERE ASTHMA?

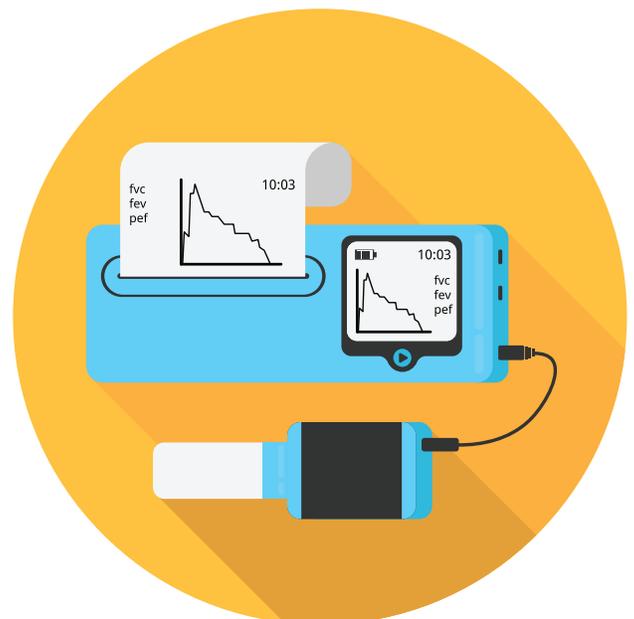
You may have trouble breathing without having asthma. You could have a cold or simply a runny nose instead of asthma. In order to see if you have asthma and not something else, you need to see your healthcare provider.

Your healthcare provider will give you a few tests to see if you have asthma. You will need to answer questions about your personal medical and family medical history. Some of the questions include:

- Do you cough at night or early in the morning, making it hard to sleep?
- Do you make high-pitched, whistling sounds (called wheezing) when you breathe?
- Does your chest feel tight, as if someone were squeezing or sitting on it?
- Do you have trouble catching your breath?

### Lung Function Tests For Asthma and Severe Asthma

If your healthcare provider thinks you have asthma, you will need to take a lung function test called spirometry, which measures how much air you breathe in and out and how fast you can breathe out. It is a painless test in which you take in a deep breath, and then blow out as hard as you can into a tube that's connected to a machine called a spirometer. This machine measures how much and how fast you blow out the air. The spirometry test will be repeated in some later office visits to see how well your treatments are working.



## Other lung function tests include:

- **Methacholine challenge test (or bronchoprovocation test)** sounds complicated, but it is simply a test that sees how responsive your lungs are to things in the environment. You breathe in different amounts of a chemical called methacholine. This chemical narrows the tubes that lead to your lungs in the same way asthma does. Your healthcare provider will stop giving you doses of the chemical if you start having trouble breathing or if there is no change in your breathing after getting the highest dose. This test is usually given in a special lung facility or a doctor's office where trained staff can handle any possible reactions
- **Fractional exhaled nitric oxide (FeNO)** test measures the amount of nitric oxide that is breathed out of your lungs. When you breathe air out, some nitric oxide is in your breath. You just breathe normally in and out of a tube attached to a portable device. Measuring the amount of nitric oxide you breathe out is a way for healthcare providers to see if certain inhaled asthma medicines are right for you. FeNO tests may be done in an outpatient asthma-and-allergy specialty clinic

## Other Tests for Diagnosing Asthma

Lung testing is important to see if you have asthma. Other tests can narrow down the diagnosis to help make sure you really do have asthma and that you get the right treatment:

- **Allergen skin tests** help your healthcare provider see if you have any allergies to such things as pet fur or flower pollen. These tests are usually done by an allergy specialist, who is trained in the best ways to test and treat allergies
- **Other tests** will help rule out conditions that only look like asthma

You might see or hear the words “**FEV<sub>1</sub>**” and “**FVC**” when getting a lung function test. FEV<sub>1</sub> stands for forced expiratory volume in 1 second. It is a measure taken in the first second of breathing out air in a spirometry test. This number is then compared to your FVC, or forced vital capacity, which is the whole amount of air you can breathe out at once. Among people with asthma, the FEV<sub>1</sub>/FVC ratio can be low—or it can be normal. (A low FEV<sub>1</sub>/FVC ratio may also indicate COPD.)

## Diagnosing Asthma in Small Children

Most children who have asthma start showing symptoms before they are 5 years old. But children often have other childhood conditions that only look like asthma. They might wheeze when they catch a cold, but they won't necessarily go on to have asthma after they've turned 6. The likelihood of your child having asthma is higher if your child already has allergies that result in such reactions as stuffy noses and itchy eyes, food allergies, eczema, and hives.

## Diagnosing Eosinophilic Asthma

If you have asthma, you might also have swelling in your airways caused by a high amount of a specific type of white blood cell called eosinophils. This can cause inflammation in the airways. A high amount of eosinophil cells can also cause severe asthma attacks and can harm your lungs.

### You may have eosinophilic asthma if you:

- Use your rescue inhaler a lot
- Wake up in the middle of the night because of asthma symptoms such as cough or trouble breathing, or asthma attack
- Have had asthma attacks that needed emergency care

A simple blood test that measures the number of eosinophil cells in your blood can help your healthcare provider see if you have eosinophilic asthma and determine the best treatment options for you.