

PULMONARY FUNCTION TESTING

TEST YOUR LUNGS, KNOW YOUR NUMBERS



Pulmonary function tests (PFTs) measure how well you move air in and out of your lungs and how well oxygen enters your body. Common PFTs are spirometry, diffusion studies and body plethysmography (ple-thiz-ma-gra-fee).

The tests are essential for helping your physician:

- Diagnose, evaluate and measure the severity of lung disease.
- Determine your response to, and the effectiveness of, specific treatment.
- Assess your ability to undergo surgical procedures.

PFT's usually take 30-40 minutes to complete. To get the most accurate results, please follow these guidelines:

- Do not smoke for at least 4 hours before the test.
- Do not drink alcohol for at least 4 hours before the test.
- Do not exercise 30 minutes before the test.
- Do not wear tight clothing that makes it difficult to take a deep breath.
- Do not eat a large meal 2 hours before the test.
- Do not use a rescue inhaler or nebulizer treatment 2 hours before the test.

Here's what to expect:

- You'll receive instructions on how to do the test. If you do not understand something, the therapist will be happy to repeat the information.
- You will breathe through a special mouthpiece and wear noseclips.
- It takes effort to do the test and you may become tired – fatigue is expected.
- If you are on oxygen, we'll usually ask you to discontinue the oxygen while taking the test.
- To achieve the most accurate results, we may repeat the test.
- The test involves some force and rapid breathing. Some temporary shortness of breath or feeling light-headed is common.

Types of pulmonary function tests

What is spirometry?

Spirometry measures the amount of air you can move out of your lungs. This test is done by having you take a deep breath and blowing out hard through a mouthpiece while wearing noseclips. The spirometry test may be repeated after giving you breathing medication to determine improvement with these medications.

What is body plethysmography?

Body plethysmography tests how much air is in your lungs after taking a deep breath and how much air is left in your lungs after breathing out as much as you can. No matter how hard we try, we can never exhale all of the air from our lungs. This test requires that you sit in an enclosed, see-through box resembling a telephone booth. You will be given instructions on how to breathe through a mouthpiece while wearing noseclips. This test consists of two cycles of normal breathing, one deep breath and panting maneuver.

What are diffusion studies?

Diffusion tests show how well the oxygen in the air you breathe moves from your lungs into your blood. You will be instructed to take a deep breath and gently exhale out as much air as possible. Then you will breathe in a quick, deep breath, hold for 10 seconds, and blow out as instructed.

Key points

- Ask questions if you do not understand the instructions for the test.
- If you have a cold or flu, let the therapist know since it may be necessary to reschedule the test.
- If you have difficulty with closed spaces (claustrophobia), let the therapist know in case one of the tests involves being enclosed.
- Ask if there are any medications you should stop before being tested.