

## Pulmonary Function Tests

Pulmonary function tests (PFT's) are breathing tests to find out how well you move air in and out of your lungs and how well oxygen enters your body. The most common PFT's are *spirometry* (spy-RAH-me-tree), *diffusion studies* and *body plethysmography* (ple-thiz-MA-gra-fee). Sometimes only one test is done, other times all tests will be scheduled, often on the same day.



### Lung function tests can be used to:

- Compare your lung function with known standards that show how well your lungs should be working.
- Measure the effect of chronic diseases like asthma, chronic obstructive lung disease (COPD), or cystic fibrosis on lung function.
- Identify early changes in lung function that might show a need for a change in treatment.
- Detect narrowing in the airways.
- Decide if a medicine (such as a bronchodilator) could be helpful to use.
- Show whether exposure to substances in your home or workplace have harmed your lungs.
- Determine your ability to tolerate surgery and medical procedures.

### To get the most accurate results from your breathing tests:

- Do not smoke for at least 1 hour before the test.
- Do not drink alcohol for at least 4 hours before the test.
- Do not exercise heavily for at least 30 minutes before the test.
- Do not wear tight clothing that makes it difficult for you to take a deep breath.
- Do not eat a large meal within 2 hours before the test.
- Ask your health care provider if there are any medicines that you should not take on the day of your test.

### What is spirometry?

Spirometry is one of the most commonly ordered

lung function tests. The spirometer measures how much air you can breathe into your lungs and how much air you can quickly blow out of your lungs. This test is done by having you take in a deep breath and then, as fast as you can, blow out all of the air. You will be blowing into a tube connected to a machine (spirometer). To get the “best” test result, the test is repeated three times. You will be given a rest between tests.

The test is often repeated after giving you a breathing medicine (bronchodilator) to find out how much better you might breathe with this type of medicine. It can take practice to be able to do spirometry well. The staff person will work with you to learn how to do the test correctly.

It usually takes 30 minutes to complete this test.

### What should I know before doing a spirometry test?

- You may be asked not to take your breathing medicines before this test.
- Instructions will be given on how to do this test. If you do not understand the instructions, ask the staff to repeat them.
- It takes effort to do this test and you may become tired. This is expected.
- If you become light-headed or dizzy during this test, immediately stop blowing and let the staff know.