

Pulmonary Function Testing (PFTs)

As those with heart disease and/or diabetes are usually aware of their blood pressures, cholesterol, and glucose levels, the importance of knowing your numbers as they apply to pulmonary function tests (PFTs) for COPD/emphysema/asthma and other lung conditions is commonly overlooked. The National Lung Health Education Program suggests the mantra "test your lungs; know your numbers." At ICPR, we strongly believe that regularly scheduled PFTs are an essential method of comparison to determine how well you are responding to treatment and if your disease is progressing.

PFTs can be used for a number of reasons:

- screening for the existence of lung disease (especially in smokers or people exposed to smoke) - evaluating lung function prior to surgery
- assessing the progression of lung disease
- determining the effectiveness of treatment

How it is done

PFTs are done in a special exam room with a PFT device attached to a computer. You will wear a nose clip and be asked to breathe into a mouthpiece connected to a recording device. You may be asked to breathe in and out as rapidly and deeply as possible. The therapist will encourage you to breathe deeply during parts of the test to get the best results.

Results

The result range will be adjusted appropriately for your age, height, sex, and sometimes weight and race. Results are often expressed in terms of a percentage of the expected value. Final results will be evaluated by Dr. Sumer. We will then further discuss results and treatment options with you.

Normal

Test results are within the normal range for a person with healthy lungs.

Abnormal (Obstructive)

This indicates that the airways are narrowed, usually causing an increase in the time it takes to empty the lungs. Conditions such as COPD, emphysema, bronchitis, infection, and asthma may cause this abnormality.

Abnormal (Restrictive)

This indicates a loss of lung tissue, a decrease in the lungs' ability to expand, or a decrease in the lungs' ability to transfer oxygen to the blood. Conditions such as pneumonia, lung cancer, scleroderma, pulmonary fibrosis, multiple sclerosis, chest injuries, obesity, pregnancy, and loss of lung tissue due to surgery may cause this abnormality.

Treatment / Follow-up

After reviewing your PFT results, a treatment plan will be designed for your specific condition. It is extremely important to follow the treatment plan as most people do not even know they have lung disease until they have lost at least 50% of their lung function. Additionally, most lung disease is progressive, getting worse year after year, if untreated. In all cases of lung disease, it is important to repeat the test yearly, or more often if necessary, to track the progression of disease and to determine if the current treatment is adequate or needs to be changed.