Lung Volume Test

A lung volume test measures the amount of air your lungs can hold. During this test, you breathe into a filtered mouthpiece that records your lung capacity.

A lung volume test, done in the Pulmonary Function Lab, takes about 10 to 20 minutes. However, this test is often done along with a full pulmonary function test (PFT), which can take 30 to 60 minutes.

Before the Test

There is no special preparation for this test. Bronchodilator inhalers (such as Albuterol®, Proventil®, Ventolin®, Combivent® or Maxair®) can affect the test results. Unless you are having trouble breathing, do not use these inhalers for at least 4 hours before the exam.

On the day of the test, plan to arrive 15 minutes before your test time. If you wear glasses, hearing aids or dentures, please have them for the test. Also, be sure to bring:

- Your doctor’s written order for the test (if one was given to you)
- A list of allergies
- A list of all your current medications (prescription, over-the-counter, and herbals)
- Photo ID
- Medical insurance information
- Medicare card (Medicare patients only)

Please come to the Galter Pavilion, 201 East Huron Street. Check in at the reception desk on the 8th floor.

Parking is available for patients and visitors in the garage at 222 East Huron Street, across from the Feinberg and Galter pavilions. For discounted rates, please bring your parking ticket with you. Tickets can be validated at the Customer Services Desks on the 1st and 2nd floor of the Feinberg and Galter pavilions; 1st floor of Prentice (including the Prentice 24-hour desk near the Superior entrance).

Please tell the technologist (tech) if you have:

- Used an inhaler in the last 4 hours
- Claustrophobia (discomfort with closed-in spaces)
During the Test
This test can be done in one of two ways.

*Inside a Body Plethysmograph*
You are seated in a chair in a glass-enclosed booth and a small plastic clip is placed on your nose. Using a filtered mouthpiece, you are asked to take small shallow panting breaths for about 5 to 10 seconds at a time. Air flow and pressure readings are recorded. During the test, it is important to keep a tight seal around the mouthpiece. The tech is able to see and hear you while you are in the booth.

*Outside a Body Plethysmograph (Gas Dilution)*
While you are seated in a chair, a small plastic clip is placed on your nose. A filtered mouthpiece is connected to an analyzer. You will be asked to breathe normally using the mouthpiece for 2 to 3 minutes. During the test, you will be breathing oxygen. It is important to keep a tight seal around the mouthpiece during the test.

After the Test
You are free to leave as soon as the test is done. There are no diet or activity restrictions.
Initial test results are sent to your doctor within 48 hours. A full report follows in about 5 business days.
If you have questions about this test, please call the Pulmonary Function Lab at 312.926.3195.

Northwestern Medicine – Health Information Resources
For more information, contact Northwestern Memorial Hospital’s Alberto Culver Health Learning Center (HLC) at hlc@nm.org, or by calling 312.926.5465. Health information professionals can help you find the information you need and provide you with personal support at no charge.
For more information about Northwestern Medicine, please visit our website at nm.org.