Lung Scan Ventilation and Perfusion

A lung scan shows air moving in and out of the lungs and the flow of blood in the smallest blood vessels in the lungs. This test helps identify blood flow blockages within the lung. The exam, done in the Nuclear Medicine department, takes about 1 1/2 hours. The amount of radiation used in this test is small and well within limits that are not harmful.

If there is a chance you could be pregnant, please tell the tech.

Before the Test

It is important to have a chest X-ray taken within 24 hours prior to the lung scan. Please contact your doctor to obtain a written order for this X-ray. You may bring the X-ray results with you to the scan, have them faxed to 312.926.8118 or mailed to:

Nuclear Medicine Department
Northwestern Memorial Hospital
Galter Pavilion
Room 8-154
201 East Huron Street
Chicago, Illinois 60611-2908

There is no other special preparation for this test.

On the day of the test, plan to arrive 15 minutes before your test time. Be sure to bring:

- Your doctor’s written order for the test if one was given to you
- Photo ID
- Medical insurance information
- Medicare card (Medicare patients only)

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

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, 2nd and 8th floors of the Feinberg and Galter pavilions.

Note: Patients who have been scheduled as an “add on” may have some delays in their testing.
During the Test

When you arrive in the Nuclear Medicine area, a nurse or technologist (tech) will ask you questions about your medical history. If you think you might be pregnant or if you are breastfeeding, please notify the tech before the start of the test.

When the test begins, you will sit in front of a special camera or lie down on an imaging table. While wearing a face mask, you will breathe a radioactive gas. The tech will ask you to take a deep breath and hold it for as long as you can, and will begin taking pictures of your lungs. When you can no longer hold your breath, you may begin to breathe normally again. You will breathe through the mask for several minutes until all the radioactive gas is gone from your lungs.

Next, you will lie down on your back and a radioactive tracer will be injected IV (into the vein). After the injection, more pictures of your lungs will be taken from 8 different angles.

The radiologist will review the images before releasing you to go home.

After the Test

You may resume your normal activities and diet after the test. The IV tracer you were given is not harmful and becomes non-radioactive within hours.

Talk with your doctor about your test results. You may obtain a copy of your results about a week after the exam from Medical Records. Medical Records is located on the 2nd floor of the Galter Pavilion.

If you have any questions about this, please call the Nuclear Medicine Department at 312.926.2320, Monday through Friday, 7:30 am to 5 pm.

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. You may also visit the HLC on the 3rd floor, Galter Pavilion at 251 E. Huron St., Chicago, IL. 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.