Lung Ventilation/Perfusion Scan

A lung scan shows the air moving in and out of your lungs (ventilation). It also shows the flow of blood in the smallest blood vessels in your lungs (perfusion). This test can find blood flow blockages in your lungs. You will have this test in the Nuclear Medicine Department. It takes about 1 1/2 hours. The amount of radiation used in this test is small and well within limits that are not harmful to you.

Before the test

You must have a chest X-ray taken in the 24 hours before the lung scan. Please contact your physician to get an order for the chest X-ray. You may bring the X-ray results with you to the lung 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

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

There is no other special preparation you need to do for this test.

On the day of the test, plan to arrive 15 minutes before it is scheduled to begin. Be sure to bring your:

- Physician’s written order for the test if you have one
- List of your allergies
- List of all your current medications (prescription, over-the-counter and herbal)
- Photo ID
- Medical insurance information
- Medicare card (Medicare patients only)

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

Parking is available for patients and visitors in the garage at 222 East Huron Street, across from Feinberg and Galter pavilions. For a discounted rate, bring your parking ticket with you. You can validate your ticket at the Customer Services Desk on the 1st, 2nd or 8th floor in Feinberg and Galter pavilions, and the 1st floor of Prentice Women’s Hospital.
During the test

When you arrive in the Nuclear Medicine Department, a nurse or technologist (tech) will ask you questions about your medical history.

If you think you might be pregnant or are breastfeeding, please tell the tech before the start of the test and before you are given an injection.

The tech will help you lie down on an imaging table. They will put a breathing mask over your nose and mouth. You will breathe in a radioactive gas. The tech will ask you to take a deep breath and hold it for as long as you can. They will begin taking pictures of your lungs. When you can no longer hold your breath, you can breathe normally again. You will breathe through the mask for several minutes until all the radioactive gas is gone from your lungs.

The tech will put an intravenous (IV) line into a vein in your arm or hand. They will give you an injection of the radioactive tracer. After the injection, they will take more pictures of your lungs from 8 different angles.

The radiologist will review the images before you go home.

After the test

You may go back to your normal activities and diet after the test. The radioactive tracer you were given is not harmful and becomes nonradioactive within hours.

Talk with your physician about your test results. You can get a copy of your results about 1 week after the test from the Medical Records Department on the 2nd floor of Galter Pavilion.

If you have any questions about this test, please call the Nuclear Medicine Department at 312.926.2340 (TTY: 711) Monday through Friday, 7:30 am to 5:00 pm.