



Lung V/Q Scan

How to prepare for your scan

A lung V/Q exam is a nuclear medicine test that gives a picture of air and blood flow in the lungs.

This handout explains how to prepare for the exam, how it works, how it is done, what you may feel during the exam, and how to get your results.

What is a lung V/Q scan?

A lung V/Q (ventilation and perfusion) nuclear medicine exam uses radioactive materials to assess airflow and blood flow in your lungs. Patients who are being evaluated for a lung transplant or lobectomy must have this exam. It is a form of radiology, because radiation is used to take pictures of the body.

How does the scan work?

You will be given 2 different kinds of radioactive materials. These are called *tracers* or *radiotracers*. The first tracer will be inhaled and will show airflow in your lungs. The second tracer will be injected into your vein through an intravenous line (IV). It will show blood flow in your lungs. The tracers collect in your lungs and give off gamma rays. The gamma camera detects the rays and then produces pictures and measurements of your lungs.

How should I prepare for the scan?

- A recent chest X-ray will be needed.
- You do not need to prepare in any special way for this exam. You may eat and drink your normal foods and do your normal activities.

How is the scan done?

1. You will receive a small dose of radioactive material to breathe in through a *nebulizer* for 3 to 4 minutes. A nebulizer is a device that changes a liquid into a fine spray or mist. You will breathe this mist into your lungs through your mouth. The technologist will instruct you how to use the nebulizer.

Questions?

Your questions are important. Call your doctor or health care provider if you have questions or concerns. Clinic staff are also available to help.

UWMC Nuclear
Medicine/Imaging
Services:
206-598-6200

Harborview Imaging
Services:
206-744-3105

2. After breathing in the radioactive material, you will lie down on a table. The technologist will take pictures of your lungs.
3. Next, the technologist will inject the second tracer into an IV in your arm. They will take more pictures after the injection.
4. The technologist will help make you comfortable. Taking the pictures may take 30 to 60 minutes. You must lie still when the camera is taking pictures. If you move, the pictures will be blurry and may have to be repeated.

What should I expect during and after the scan?

- You may have some minor discomfort from the IV.
- Lying still on the exam table may be hard for some patients.
- Most of the tracers will leave your body in your urine or stool. The rest simply goes away over time.

Who interprets the results and how do I get them?

When the test is over, the nuclear medicine doctor will review your images, write up a report, and discuss the results with your doctor who referred you for this test. Your doctor will then talk with you about the results and discuss your treatment options.

UNIVERSITY OF WASHINGTON
MEDICAL CENTER
UW Medicine

HARBORVIEW
MEDICAL
CENTER 
UW Medicine

UWMC Imaging Services

Box 357115
1959 N.E. Pacific St. Seattle, WA 98195
206-598-6200