

Lung V/Q Scan

What to expect and how to prepare

This handout explains a lung ventilation and perfusion (V/Q) scan. It includes how the scan works, how to prepare, what to expect, and how to get your results.

What is a lung V/Q scan?

A lung V/Q scan is a nuclear medicine scan. Nuclear medicine scans use radioactive materials to take pictures of the inside of your body.

A lung V/Q scan shows how well your lungs are working. “V/Q” stands for *ventilation* and *perfusion*.

Who needs this scan?

You must have this scan if you are being assessed for a surgery such as a lung transplant or *lobectomy*.

How does the scan work?

You will be given 2 kinds of radioactive materials. These are called *tracers* or *radiotracers*.

- You will inhale the 1st tracer. It will show how air flows in your lungs.
- We will inject the 2nd tracer through an *intravenous* (IV) line in your arm vein. This tracer 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 images of your lungs.



A gamma camera is used to take images of your lungs during this exam.

How do I prepare?

Before the scan, you may eat and drink as usual and do your normal activities.

How is the scan done?

- We will place an IV line into your arm vein.
- We will give you a *nebulizer* that contains a small amount of tracer. A nebulizer is a device that changes a liquid into a fine mist. The technologist will teach you how to use the device.
- You will breathe through the nebulizer for 3 to 4 minutes. As you breathe in through your mouth, the tracer mist enters your lungs.
- You will then lie down on a table with the gamma camera above you. The technologist will help you get comfortable.
- The technologist will then take pictures of your lungs.
- Next, the technologist will inject the 2nd tracer into the IV. They will then take more pictures.

What should I expect during and after the scan?

- The scan may take 30 to 60 minutes. You must lie still when the camera is taking pictures. If you move, the images will be blurry and may have to be repeated.
- You may have some minor discomfort from the IV.
- Lying still on the exam table may be hard for some people.
- Most of the tracers will quickly leave your body in your urine or stool. The rest simply goes away over time.

Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

- UWMC Nuclear
Medicine/Imaging
Services: 206.598.6200
- Harborview Imaging
Services: 206.744.3105

Who interprets the results and how do I get them?

When the test is over, the nuclear medicine doctor will review your images and write up a report. They will then share the results with your provider who referred you for this test.

Your provider will give you the results. You and your provider will decide the next step, such as treatment for a problem, as needed.

You may also read your results on your eCare Results page. If you need copies of your images on disc, call 206.598.6206.