



**University
Hospitals Sussex**
NHS Foundation Trust

Lung (V/Q) scan

Imaging

Patient information

What is this information about?

This information is about your Lung (V/Q) scan. It tells you how to prepare for your scan, what will happen during your scan, any risks to be aware of, and what happens after your scan.

Why have I been given this information?

You have been given this information because your doctor has referred (sent) you for a Lung (V/Q) scan.

Reading this information can help you to know what to expect from your scan. Following the advice will help to make sure that the scan goes as well as it can.

What is Nuclear Medicine?

Nuclear medicine:

- is a safe and painless technique which provides medical images of the body.
- uses small amounts of radioactive materials as tracers to diagnose or treat disease. In diagnosing a condition, the radiation is detected by a special type of camera called a 'Gamma camera'.

What is a Lung (V/Q) scan?

A V/Q scan helps to diagnose conditions that affect the air supply (ventilation) and blood supply (perfusion) to your lungs. It is most commonly used to find blood clots (pulmonary embolism) or before lung resection surgery.

What can I expect during my appointment?

- The scan is usually in two parts. Surgery resection patients only need a perfusion scan.
- While you are having the scan you must lie as still as you can on a table while a camera moves over your body. The camera will not touch you and you will not be in a tunnel.

- The ventilation scan is first. This involves breathing in a radioactive gas through a mouthpiece. This is followed by the scan which will take 20 minutes.
- The perfusion scan is next. This involves an injection of a radiotracer into the vein of your arm. This is followed by the perfusion scan which will take 20 minutes.
- You will be in the department for approximately 1 hour.

Where should I go for my scan?

You will have your scan in the Nuclear Medicine Department, St Richard's Hospital.

Use the main entrance to the Outpatients Department. This is in the South Wing of the hospital.

Once you are inside the Outpatients Department, turn right and take the stairs or lift to the Department of Nuclear Medicine on the first floor.

Wheelchairs are available just inside the entrance on the ground floor.

If you are arriving by car, please use hospital entrance number 2.

If you need to park, use the 'pay on foot' car park close to the entrance to the Outpatients department (South car park). Pay at the end of your parking session using the machines in the Outpatients department entrance. Disabled parking bays are available for the registered disabled near the main Outpatients' entrance.

How can I prepare for my Lung (V/Q) scan?

- **Eating and drinking.** You can eat and drink as usual before the scan appointment.
- **Medications.** You do NOT need to stop any medication for a Lung (V/Q) scan.

Might I have an allergic reaction to the radioactive injection?

Allergic reactions to the radiotracer are very rare but can happen. The perfusion radiotracer given is prepared from Human Albumin. Please tell staff if you have a hypersensitivity to this product.

Can I have a Lung (V/Q) scan if I am pregnant or breastfeeding?

We will check your pregnancy status with you before the scan. If you are, or think you may be, pregnant, you must tell us as soon as possible.

If you are breastfeeding, be ready to express and discard milk following the radiotracer injection.

Will I need to undress for my scan?

We recommend that you wear comfortable, loose clothing. Usually, you do not need to undress for your scan. You may need to remove items such as belt buckles, jewellery and other items of clothing with metal in them.

What should I do if I cannot come to my appointment?

You must let us know as soon as possible if you are unable to attend. This is so that we can offer the appointment to someone else.

Be aware,

it is Trust policy that you will not be offered a further appointment if you do not attend a booked appointment.

This means that you will need to return to the doctor who referred you for the scan.

How long will the scan take?

Lung (V/Q) scans can take approximately 60 minutes. A perfusion only scan will take 20 minutes.

Who will be at my scan?

A radiographer or an assistant practitioner will be with you in the room during the scan.

There are students training in the scanning department. A qualified radiographer will supervise them if they do your scan. Please tell us if you would prefer not to have a trainee at your scan.

Are there any risks?

We are all exposed to natural background radiation every day. This comes from the ground, building materials around us, the food we eat and from the sun.

This scan will give you a small extra radiation dose on top of this. The amount depends on the type of scan you are having. It ranges from a few days' natural background radiation to a few years'.

After weighing up the risks and benefits your doctor has decided that having the scan is right for you. They believe that the potential benefits outweigh the risk.

The radiation dose for the scan is listed in the table below, along with a comparison of radiation doses from other sources of radiation.

The only effect known at these low doses is a very small increase in the chance that you might get cancer many years or even decades after the exposure.

The additional cancer risks from these different sources of radiation are shown in the table on the next page.

These risk levels are a very small addition to the 1 in 2 chance we all have of getting cancer at some point during our lifetime.

Radiation Source	Radiation Dose	Lifetime additional risk of cancer per examination	Risk
Chest X-ray	0.014 mSv	1 in 1,350,000	Minimal
Transatlantic flight	0.08 mSv	1 in 250,000	Minimal
UK average annual radiation dose	2.7 mSv	1 in 7,500	Low
Lung (V/Q)	2.8 mSv	1 in 7,000	Low
Lung Perfusion only	1.1 mSv	1 in 19,000	Low
Chest CT	6.2 mSv	1 in 3,200	Low

After your appointment

For some patients we may need a chest x-ray before your scan. If you need further images the radiographer will give you further instructions.

Can I drive home after my scan?

Yes.

When will I get my scan results?

The results will be sent to the doctor who asked for the examination and will usually be with them within 2 weeks. If you have an appointment sooner than this then please let us know so we can make sure the results are provided in time.

Can I bring someone else with me to my appointment?

Yes. You can bring someone, such as a friend, relative or carer with you. They must be over the age of 16.

Be aware,

you may not bring children under the age of 16 or pregnant people with you to your appointment. There is no child-minding service at the Trust. You must make your own arrangements for childcare while you are having your appointment if you need to.

To protect other people from radiation, after you have had your radiotracer injection, plan to keep a distance of at least 1 metre from them until the end of the day. For further advice please contact the Nuclear Medicine Department.

How is my medical data protected?

Everyone working within the NHS has a legal duty to keep patient information about you confidential and secure. If you have any concerns around the use of your medical and diagnostic imaging information, copies of the 'Care Record Guarantee' and 'Your Medical Data' leaflets can be downloaded from:

www.uhsussex.nhs.uk

You can get a printed copy of these leaflets from the PALS (Patient Advice and Liaison) office at Worthing or St Richard's, Chichester, Hospitals.

Who can I contact if I need further information or support after I have read this information?

For further general information on Nuclear Medicine and Lung (V/Q) scans visit the **British Nuclear Medicine Society** website www.bnms.org.uk

If you have questions or need further information about your Lung (V/Q) scan appointment, please contact the Nuclear Medicine Department (staffed Monday to Friday):

Nuclear Medicine Department, St Richard's Hospital, First floor, Outpatients block (South Wing)

St Richard's Hospital

01243 831456 uhsussex.nuclearmedicine.nhs.net

I need help with transport to my appointment for medical or financial reasons. What help is available?

To find out what help with transport you may be able to get please visit the UHSx Patient Transport web page www.uhsussex.nhs.uk/patients-and-visitors/patient-transport.

To enquire about booking the hospital transport service phone: **0300 777 4444**

To check whether you can get help with the cost of transport, phone the St Richards Hospital switchboard **01243 788122** and ask for the Cashiers Office.

Be aware, you should do this before your appointment.

This leaflet is intended for patients receiving care in St Richard's Hospital.

Ref. number: 2614 Publication date: 09/2025 Review date: 09/2028

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The information in this leaflet is for guidance purposes only and is in no way intended to replace professional clinical advice by a qualified practitioner.

