

# V/Q scan

Nuclear Imaging Department Radiology

## Introduction

This leaflet will help you decide about having a V/Q scan. It explains what is involved and what the possible risks are. It is not meant to replace informed discussion between you and your doctor.

## What is Nuclear Imaging?

Nuclear Imaging is a way of imaging different parts of the body using a small amount of radioactive isotope attached to different chemicals. These radioactive isotopes give off gamma rays, which are similar to X-rays.

A gamma camera is used to detect these rays and produce an image on the computer. Unlike ordinary X-rays, nuclear imaging can be used to show how well an organ is working as well as what it looks like.

The radioactive isotope is normally given as an injection into a vein but can be inhaled or swallowed depending upon the test.

## What is a V/Q scan?

A V/Q scan allows us to assess the blood flow and air flow into your lungs. This information can then tell us if you have any blood clots in your lungs.

This scan is done by means of an injection of a small amount of liquid radioactive isotope into the arm or hand. A second radioactive isotope is also used but this is a gas and can be breathed in through a face mask.

The scan itself then involves taking two 3D pictures of the lungs done lying on an imaging couch.

Some times the scan is done in two separate parts, depending on what type of gas is used.

## Is there any preparation?

If you have currently or have had in the past had any heart problems please contact the department as there are some rare conditions that would mean we can't do this type of scan.

The liquid radioactive isotope used in this scan does contain blood born products. If you have an objection to this please contact us so alternative imaging can be organised.

You can eat, drink and take any medication as normal on the day of your scan.

**The prevention of infection is a major priority in all healthcare and everyone has a part to play.**

- Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available
- If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice from 111
- Keep the environment clean and tidy
- Let's work together to keep infections out of our hospitals and care homes.

## Can I bring a relative / friend?

Yes, but they should be over 18 and not pregnant.

Children under 16 years attending for a scan should be accompanied by a parent or guardian.

## What if I am pregnant or breastfeeding?

If you are pregnant or think you may be pregnant, you should inform the department before attending for your scan. Also certain radioactive substances are excreted in breast milk. If you are breastfeeding you should tell us prior to coming for your scan, so we can advise you of any special precautions.

## What happens during the scan?

Initially we will get you to breathe the radioactive gas through a face mask for 2-3 minutes. This will be followed by a 3D image of your chest. The picture is taken with you lying on the imaging couch with the camera over your chest and will take approximately 10 minutes.

You will then be given an injection of the liquid radioactive isotope. This will be followed by taking another 3D picture of your chest which takes about 7 minutes.

In some situations we will do the liquid and gas images on different days.

During the scan you can remain fully clothed, although any jewellery will need to be removed.

## How long will it take?

The scan will take approximately 30 – 45 minutes.

## What are the risks?

Most things that we do in life or in medicine have a small risk and we want you to understand any risks involved. Please remember that we would not recommend this test if we did not think that the risks were outweighed by the potential benefits.

## Radiation

The radioactive injection exposes you to gamma rays which are a form of radiation similar to X-rays. We use as little radiation as possible – the amount used is similar to that in many other X-ray or nuclear medicine scans and is the same as a few years' worth of the natural background radiation to which we are all exposed.

## Are there any side effects?

The injection does not cause any side effects nor will it make you sleepy. You will still be able to drive and carry on with any normal activities.

## When do I get the results?

We cannot give you the results of the scan on the day you attend.

The scan will be reviewed and a written report sent to the Consultant/GP who referred you. Your Consultant will then arrange a follow up appointment to discuss the results of your scan.

## What should I do if I have a query about my appointment?

If you have any queries about your scan or wish to alter the appointment please contact the department on:

01902 307999 ext 86347

Monday–Friday, 09:00 - 16:00

If you need an interpreter, please let us know and we will arrange one.

Please note that in view of patient confidentiality, we are unable to discuss any details concerning this appointment with anyone other than you.

## Where can I get further information?

### Websites:

For general information about radionuclide tests, visit The British Nuclear Medicine Society website: [www.bnms.org.uk](http://www.bnms.org.uk)

If you wish to know more about the radiation used in medical examinations, information can be found on the Public Health England website: [www.gov.uk/government/organisations/public-health-england](http://www.gov.uk/government/organisations/public-health-england)

## Radiology Department

The Nuclear Imaging department is on the 2nd floor of the Radiology Department.

The Radiology Department is situated off the main hospital street close to Greggs.

A site map can be found on the reverse of your appointment letter.

## Transport Information

### Zone A: A2 Radiology Department

**The nearest car parks** are P5 and P6. Please allow time to park as our car parking areas may be busy. Car Parking is "pay as you leave". There are designated spaces for disabled.

### Public transport:

Details of the buses serving the hospital are available on our website: [www.royalwolverhamptonhospitals.nhs.uk](http://www.royalwolverhamptonhospitals.nhs.uk)

## English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

## Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

## Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowaliby Państwo usługi tłumaczenia ustnego lub innej pomocy.

## Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਆਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਭਾਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

## Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

## Traditional Chinese

如果您需要以其他方式了解信息，如易读或其他语种，请告诉我们。

如果您需要口译人员或帮助，请告诉我们。