

## Having a lung scan

Your doctor has recommended that you have a lung scan. This is a nuclear medicine test. A scan of your chest is taken to help your doctor find out if there are any problems in your lungs.

### What is nuclear medicine?

Nuclear medicine helps doctors to check how well different parts of your body are working. A small amount of a radioactive substance (tracer) is given, usually by injection into a vein. The tracer gives off gamma rays, so we can measure the distribution of that tracer in your body. This measurement is usually done using a gamma camera, although occasionally blood samples may be needed.

### Is there any risk from the radiation?

We will expose you to ionising radiation when we carry out this examination. We are all exposed to ionising radiation from naturally occurring sources such as cosmic rays, certain types of soil and rocks and even food we eat. Ionising radiation can cause cell damage that in turn, after many years, may turn cancerous. The radiation associated with your exam will therefore carry a small risk which is less than 0.1%. This risk will be far outweighed by the benefits of having this exposure. We will also tailor the amount of radiation we use to you.

Please read the *Important points* section below. If you have any concerns, please contact us.

### What preparation do I need for my lung scan?

There is no special preparation for your scan. You can eat and drink as normal. You can continue to take any medication that has been prescribed for you by your doctor. It is also safe for you to take 'over the counter' medicines. You Should have a chest X-Ray before attending this scan. If you haven't please contact the department.

### How is my lung scan carried out?

On arrival at the department, we will take you into the scanning room and ask you to inhale a small amount of radioactive gas. Scans of your lungs will be taken to determine how well you are able to breathe air into them and how good their blood supply is.

Following this, we will give you a small injection of radioactive tracer followed by a similar set of scans. You will need to lie down on the scanning couch for these scans. The whole procedure will take 30-60 minutes. You will need to take off your shoes and remove jewelry and metal items from your pockets. There is no need to take off your clothes for the scan, but if any of your clothing has metal studs or buttons, you may be asked to remove it.



### Are there any side effects?

The tracer that we inject will not produce any side effects. You can continue with your usual daily activities. In particular, it will not make you drowsy and so will not prevent you from driving a car.

### What happens after my lung scan?

Once your lung scan is completed you may leave the department immediately. You will be able to eat and drink as normal. You may go anywhere you wish, but you should avoid prolonged close contact with pregnant individuals and children for the rest of the day. This is to avoid exposing children to unnecessary radiation.

### How will I get the result of my lung scan?

Your lung scan will be reported by the nuclear medicine consultant within 48 hours of completion. The results of your test will then be made available to the doctor who referred you.

### Important points

- Due to the nature of these investigations, we advise that **you should not be accompanied by anyone who is pregnant and should not bring young children to the department**. With most of these investigations, the level of radioactivity will have decreased to a safe level by the time you arrive home after the scan. However, some investigations need more specific restrictions with regards to contact with young children and these will be explained.
- We are committed to ensuring patients are free from discrimination regardless of their gender or sexual orientation. If your gender was female at birth and you are transgender or non-binary, please inform a member of staff as we legally need to rule out the possibility of pregnancy before we can go ahead with some of our examinations. This information will not be recorded or shared without your consent.
- If you are afraid of needles you can ask for a spray to numb the area, before your injection.
- If you are **pregnant or breastfeeding**, please contact the department as soon as possible to find out if you can have this test. Generally, nuclear medicine tests are not carried out on pregnant individuals unless absolutely necessary and then the dose of radioactivity will probably be reduced.

### Contact details

If you have any queries or further questions, please contact us:

Sutton: 020 8661 3286 / 3287

Chelsea: 020 7811 8541

Email: [rmh-tr.rmuclearmedicine@nhs.net](mailto:rmh-tr.rmuclearmedicine@nhs.net)

Alternatively, please call:

**The Royal Marsden Hotline:** 020 8915 6899  
(available 24 hours a day, 7 days a week)

