

The ROYAL MARSDEN

NHS Foundation Trust

Having a bone scan

Nuclear Medicine

Patient Information



Introduction

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

What is a nuclear medicine bone scan?

A scan of your skeleton is taken to help your doctor find out if there are any problems in your bones. A small amount of a radioactive substance (tracer) is given 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 done using a gamma camera.

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 bone scan?

There is no special preparation for your scan. You can eat and drink as normal. You do not need to have a full bladder.

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.

How is my bone scan carried out?

On arrival at the department, we will give you a small injection of radioactive tracer into a vein. This will be absorbed into your bones over about three hours. During this time, you can leave the department, but you will need to drink plenty fluids (such as tea, coffee and water). We recomend around 1.5litres (2.6 pints). However, you do not need a full bladder for your scan.

Occasionally, it may be necessary to take scans while the tracer is being injected in which case you will be asked to lie in the scanner. These scans take about 10 minutes.

When you return to have your scans taken two to three hours later, we will ask you to lie on the scanner couch while the gamma camera passes over your whole body. We will ask you to take off your shoes and remove jewellery 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 change into an hospital gown. We may require extra scans. The scan will take about 30–45 minutes.

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 bone scan?

Once the scan is completed you will be able to 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 bone scan?

Your bone scan will be reported by the nuclear medicine consultant within three working days 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. Please call the Nuclear Medicine Department ahead of your scan if you would like this.
- 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 us

If you have any queries, please contact us:

Nuclear Medicine Department

Sutton 020 8661 3286 / 3287

Chelsea 020 7811 8541

Email rmh-tr.rmuclearmedicine@nhs.net

Alternatively, please call:

The Royal Marsden Hotline: 020 8915 6899

You can ring the hotline 24 hours a day, 7 days a week.

Call us straight away if you are feeling unwell or are worried about the side effects of cancer treatments.

This service provides specialist advice and support to all Royal Marsden patients, as well as to their carers, and both hospital and community-based doctors and nurses caring for Royal Marsden patients.

References

This booklet is evidence based wherever the appropriate evidence is available, and represents an accumulation of expert opinion and professional interpretation.

Details of the references used in writing this booklet are available on request from:

The Royal Marsden Help Centre

Telephone: Chelsea 020 7811 8438 / 020 7808 2083

Sutton 020 8661 3759 / 3951

Email: patientcentre@rmh.nhs.uk

No conflicts of interest were declared in the production of this booklet.

Should you require information in an alternative format, please contact The Royal Marsden Help Centre.

The patient information service is generously supported by The Royal Marsden Cancer Charity.

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Registered Charity No.1095197



Revised April 2026. Planned review April 2029
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Radiotherapy and
Chemotherapy Services
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