



Having a two-phase bone scan

A two-phase bone scan is a test that looks at the activity of some cells in your bones. It may be used to investigate acute inflammation due to infection, e.g. osteomyelitis or to evaluate prosthetic joints for infection or loosening.

Is it safe for me to have the scan?

For this scan it is necessary to inject a small amount of radioactive tracer, called a radiopharmaceutical, in order to take the pictures. The small risk from this radiation dose is outweighed by the useful information that will be gained by having the scan. There is a table of radiation risks from various sources at the end of this leaflet. Ask if you want any more information. All investigations are vetted to make sure this is the appropriate test for you. If you do not understand why you need to have this scan, please speak to the doctor who referred you.

Could you be pregnant?

If you know that you are pregnant, or there is any chance that you may be pregnant, then please contact the department where you will be having the scan. **Do this as soon as possible as the scan may be postponed. Also contact the department if you are breastfeeding**, as we may give you special instructions.

Preparation for your scan

There are no special preparations for a bone scan. You can eat, drink and take any medicines as normal.

Your injection

A small amount of radioactive tracer will be injected into a vein in your arm or hand. You may have had a blood test in the past. This is much the same. You will feel the 'pinprick' of the needle a bit, but that is all. After the injection, you will have two sets of scans: at 10 minutes and approximately 2 hours after the injection. During the time between the 2 scans you can leave the department if you wish. You should drink plenty of non-alcoholic liquids and go to the toilet as often as you need. This helps to get good pictures of your bones and reduces your radiation exposure. Please let the staff know if you are on fluid restriction for any reason. You may eat normally at all times.

Your scan

Before the scan, you may be asked to go to the toilet to empty your bladder. You will need to remove any metal items such as jewellery or we may ask you to wear a hospital gown.

The scans are taken by a special machine called a gamma camera. This is not a closed tunnel but the camera detectors will come close to you. The scans will be of the bones that your doctor

is interested in – e.g., your knees, hips or spine. You will not be left on your own – there will always be someone immediately available. The first scan at 10 minutes usually takes 10-15 minutes. The second scan can take up to 1 hour and it is very important that you keep still during this time. If you think that you will find this difficult please speak to someone from the Medical Physics Department before your appointment.

After your scan

It is very unlikely that you will feel any side effects after the scan but if you think that you have, please let the Medical Physics Department know. You may continue all your normal activities unless you have been advised otherwise.

After your scan, there will be some radioactivity left in your body but this will not present a significant risk to other people around you. The radioactivity in your body will soon disappear, but if you continue to drink plenty of liquids this will help clear the radioactivity more quickly.



Your results

Your bone scan will be looked at by a specialist doctor, who will issue a report. The report will be sent to the doctor who requested your scan and they will be able to tell you how the result of your bone scan affects your care.

Contacting us

Medical Physics Department, Level 1 North Block, Monday to Friday, 9.00 am to 5.00pm. If you have any questions about your treatment, please ask the staff looking after you or telephone **0118 322 7355** or email: **rbb-tr.physics@nhs.net**

To find out more about our Trust visit www.royalberkshire.nhs.uk

Please ask if you need this information in another language or format.

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The table below is a simple guide to the levels of radiation risks for various examinations. These are measured in millisieverts (mSv).

Source of exposure (using RBFT local diagnostic reference levels (DRLs) for Nuclear Medicine)	Dose
Having a chest x-ray	0.014 mSv
Taking a transatlantic flight	0.08 mSv
UK average annual radiation dose	2.7 mSv
Two phase bone scan*	3.9 mSv
CT scan of the chest – CT scan of whole spine	6.6 mSv – 10 mSv

*Please note that the dose stated is for the radiopharmaceuticals (radioactive drugs) given in your injection, to image your bones. A CT scan is required as part of the procedure and this will incur an additional dose, which varies depending on the body part being imaged.