

# **Bone Scans for Children**

Information for patients, relatives and carers

① For more information, please contact: Radiology Department,  
York Hospital, Wigginton Road, York, YO31 8HE

Nuclear Medicine  
Telephone: 01904 825936

---

## **About this leaflet**

In this leaflet we tell you about the procedure known as a Nuclear Medicine bone scan. We explain what is involved and what the possible risks are. The information in this leaflet is not meant to replace informed discussion between you and your child's doctor but can act as a starting point for such a discussion.

## **What is a bone scan?**

Nuclear medicine scans use radioactive tracers to get information about tissues and organs that cannot be obtained using other scanning techniques. A bone scan gives information about your child's bones and joints.

## **Are there any alternative procedures?**

There may be alternative imaging studies available. However, your doctor has decided this test is the most appropriate for your child, and it gives different information to other types of scan. If you have any concerns, please discuss them with the doctor who referred your child to us.

## **What are the benefits?**

The benefits of the scan are that it is a non-invasive, safe and quick test and provides detailed images of the bones and joints for accurate results.

## **How do we prepare for the scan?**

No special preparation is needed for this scan, and your child can continue to eat and drink normally. If you are pregnant, we suggest arranging for somebody else to bring your child for the scan. If there is nobody else available to do so, please telephone us on 01904 725936.

## **What happens on arrival?**

Please go to the Child Assessment Unit for the appointment time that is specified on your letter. On the Child Assessment Unit, your child will have anaesthetic cream applied to their arm/hands; this is usually the insides of both elbows and the back of both hands. Once the anaesthetic cream has taken effect, your child will have a small cannula (tube) inserted into a vein. They will be given a small injection of a radioactive tracer through this cannula.

After the injection, the cannula is removed, and you and your child may leave the Child Assessment Unit if you wish. Your child may eat as normal. We recommend that they drink plenty and go to the toilet frequently. Three hours after the injection, you should go to the nuclear medicine department for the scan.

## **Why do I have to wait three hours?**

The radioactive tracer is injected into your child's bloodstream and over a period of time, it becomes concentrated in their bones. It is important that we have the maximum amount of radioactive tracer in the bones and very little left circulating in the blood. Evidence shows that the best images are obtained after waiting for three hours.

## **What does the bone scan involve?**

The scan is performed using a machine called a gamma camera.

Your child will be asked to lie on a bed while the gamma camera takes the pictures. You may accompany your child at all times. The scan will take about 20 minutes and it is important that your child stays as still as possible.

## **What happens after the scan?**

When the scan is finished, you are free to leave nuclear medicine. Sometimes plain X-rays have also been requested by your doctor. These will be taken after the bone scan.

We recommend that your child drinks plenty of fluids for the rest of the day as this helps flush any remaining radioactive tracer out of the body.

Your child's urine will be slightly radioactive for the rest of the day. If your child wears nappies, we suggest you use gloves and an apron for nappy changing (we can provide you with some). It is also very important to wash your hands well after nappy changes or helping your child with toileting.

## **Results**

You will not be given the results on the day of the scan. A report will be sent to the paediatrician who asked us to do the test. They will then get in touch with you.

## **What if I have any other questions?**

If you have any worries or questions about your scan, please feel free to telephone us on 01904 725936 and we will be happy to answer any questions you may have.

## **Are there any risks or complications?**

Nuclear medicine procedures are very safe diagnostic imaging tests. Side effects from the injection are extremely rare and usually mild, for example a rash, itching, and nausea. If your child is going to have any side effects, it will normally be within a couple of hours of the injection and may last up to 48 hours.

The amount of radioactive tracer injected is very small, and after 24 hours, most of the radioactive tracer will have passed out of their body. There is radiation in the air and ground all around us called background radiation. Most radioisotope scans give you on average the equivalent of a year's background radiation.

Further guidance has been published by Public Health England, visit website <https://www.gov.uk/government/publications/ionising-radiation-from-medical-imaging-examinations-safety-advice>

## **Tell us what you think of this leaflet**

We hope that you found this leaflet helpful. If you would like to tell us what you think, please contact: Nuclear Medicine, Radiology Department, York Hospital, Wigginton Road, York, YO31 8HE or telephone 01904 725936.

## **Patient Advice and Liaison Service (PALS)**

PALS offers impartial advice and assistance to patients, their relatives, friends and carers. We can listen to feedback (positive or negative), answer questions and help resolve any concerns about Trust services.

PALS can be contacted on 01904 726262, or email [yhs-tr.patientexperienceteam@nhs.net](mailto:yhs-tr.patientexperienceteam@nhs.net)

An answer phone is available out of hours.

## **Teaching, training and research**

Our Trust is committed to teaching, training and research to support the development of health and healthcare in our community. Healthcare students may observe consultations for this purpose. You can opt out if you do not want students to observe. We may also ask you if you would like to be involved in our research.

## **Leaflets in alternative languages or formats**

If you would like this information in a different format, including braille or easy read, or translated into a different language, please speak to a member of staff in the ward or department providing your care.

Patient Information Leaflets can be accessed via the Trust's Patient Information Leaflet website: [www.yorkhospitals.nhs.uk/your-visit/patient-information-leaflets/](http://www.yorkhospitals.nhs.uk/your-visit/patient-information-leaflets/)

Owner	Jo Hopkins, Radiographer Specialist
Date first issued	October 2007
Review Date	August 2024
Version	7 (issued August 2024)
Approved by	Nuclear Medicine Modality Group
Document Reference	PIL768 v7
© 2024 York and Scarborough Teaching Hospitals NHS Foundation Trust. All Rights reserved.	

[www.yorkhospitals.nhs.uk](http://www.yorkhospitals.nhs.uk)