CT head: For 0-5 month old babies approximately 6 to 9 months of UK natural background radiation.

For 6-11 month old babies - approximately 7 to 11 months of UK natural background radiation. The skeletal survey and follow-up x-rays at RACH delivers the same amount of radiation as 2-3. months of UK average background radiation.

What is an eye review?

An eye specialist can use a special torch to look at the back of your child's eyes to detect bleeding at the back of the eye. It can also detect some metabolic conditions. Eye drops are used to help the specialist see your baby's eye better. They are completely safe and take about 30 minutes to work.

Will photos be taken of my child?

Photos will be taken of any injuries or skin markings by the hospital's specialist photographers. These photos are part of the medical notes. They are stored electronically and securely and access to them is restricted. We will discuss this in greater detail with you.

How will you seek consent?

Before we perform investigations / photographs on your child we will request your consent. This process ensures that you understand what we are doing, and why. You have the right to withhold or withdraw your consent at any time. However, if consent is withheld or withdrawn, further conversations with the wider team, including social services, will be needed to be held to determine the next steps and ensure the safety of the child or children involved

What happens next?

You will be informed of the results of the skeletal survey following review by a consultant paediatric radiologist.

The x-ray results at 2 weeks should be sent to you in writing. If there is a new finding you will be contacted by phone.

Some of the blood test results are available on the same day. Other results may take longer.

Social services will consider all the information in order to decide on the best plan for your child and other children.

Please keep this leaflet. You can use this space to record the name of your social worker and contact details

Contact details

Children's Safeguarding TeamRoyal Alexandra Children's Hospital

Eastern Road, Brighton BN2 5BE

Telephone: 01273 523152

Safeguarding Children Team:

01273 696955 Ext. 62363

Produced by the Children's Safeguarding Team Authors: FH / LP / DF

This leaflet is intended for patients receiving care in Brighton & Hove or Haywards Heath

Reference no. 2112 Publish Date: March 2022 Review Date: March 2025

© University Hospitals Sussex NHS Foundation Trust Disclaimer: The information in this leaflet is for guidance purposes only and is in no way intended to replace professional clinical advice by a qualified practitioner.







Children's Hospital

Leaflet 2: Safeguarding tests in hospital

Information about blood tests. x-rays, scans and photographs

This leaflet should be provided together with Leaflet 1: **Safeguarding & Child Protection** assessments

Young children have accidents every day but sometimes an unusual injury or unexplained injuries causes safeguarding concern. If a health professional is concerned about the cause of your child's injury or illness, they have a duty of care to find out more information. Doctors are required to *consider* child abuse as a possible cause for injuries or medical events and act according to professional standards of care.

This usually involves speaking to social services and sometimes the police. You will be told if this happens.

This leaflet aims to explain the tests that are used to evaluate young children if there are concerns that a child may have come to harm.

What tests and examinations will my child need?

The doctor will take down a detailed medical history of your child, and examine them. Your child may need:

- Blood tests
- X-rays, including a CT head scan and a skeletal survey
- Eye examination, called an eye review

These tests are based on the age of the child and on UK guidance from the Royal College of Radiologists and the Royal College of Paediatrics and Child Health.

The tests help provide further information about your child's injury. They can also help to assess possible underlying medical conditions.

Your child will likely be admitted to the children's ward so the tests can be completed.

In almost all situations, a parent stays with the child during their time in hospital (unless social services have grounds to disagree.)

What is a CT head scan?

With young children, especially babies, it can be very difficult to know if they have had a head injury. CT is a type of x-ray scan to create detailed pictures of your child's brain and skull. It takes less than 5 minutes. It helps detect fractures, bleeding and some other conditions.

It is important your child stays still for the scan. If your child is a young baby, we may ask you to feed them and then wrap them in a blanket to help them fall asleep so that they are still for the scan.

If they are older, we may need to give your child sedative medications to make them sleepy to keep them still enough.

What is a skeletal survey?

Skeletal surveys are used to look for broken bones (fractures), metabolic diseases, and abnormalities or conditions of bone development.

Babies can have undetected fractures without any signs on examination. This may be because the fracture is old and no longer painful, or because the break is in an area that when handled gently causes minimal upset. Fractures can occur without any obvious bruising.

Fractures can be difficult to see on x-ray, so it means that views are taken from different angles to aid detection.

In total, 25 x-rays are taken (arms, legs, chest, torso and head).

It is important that the pictures are not blurred by movement, so the radiographer may ask you to help them hold your child's limb still and in the correct position. If it helps, you can breast feed them. The whole process may take up to an hour. Our skeletal surveys are always looked at by two radiologists to ensure that nothing is missed.

Please tell the radiographer if there is any chance that you could be pregnant.

We know that some fractures may be invisible at first, but may become visible when the bones start to heal about ten days later. Therefore a 2nd appointment will automatically be made for your child to return for repeat x-ray of the chest, limbs and other parts that looked unusual on the first x-rays. In some cases, the repeat x-ray helps rule out suspected abnormalities (which can turn out to be normal).

Is there a radiation risk to my child?

As always, your child's health is our priority. We think carefully about weighing up the very low risk of harm from x-rays against the benefit of detecting fractures in a young child and preventing future harm. We only recommend these tests if we believe they are in your child's best interests.

We are all exposed daily to radiation found in the environment, mainly from naturally occurring sources. This is called 'background radiation'. In most parts of the UK we are exposed to 2.3mSv/year (higher in Cornwall, lower in Sussex).

At RACH we adjust the radiation dose to ensure children get the lowest dose possible whilst ensuring good enough picture quality.

Our medical physics department has calculated the effective radiation doses from our machines for infants under a year: