Your child's x-ray examination

Information for children, families and carers

We have written this factsheet to explain what will happen at your child's x-ray examination. We hope it will answer some of the questions you may have. If there is anything you don't understand, a member of your child's healthcare team will be happy to explain further.

What is an x-ray?

An x-ray is a quick and painless procedure used to produce images of the inside of the body. It's a very effective way of looking at the bones and can be used to help detect a range of conditions.

How do x-rays work?

X-rays are a type of radiation that can pass through the body. They can't be seen by the naked eye and you can't feel them. As they pass through the body, the energy from x-rays is absorbed at different rates by different parts of the body. A detector on the other side of the body picks up the x-rays after they've passed through and turns them into an image.

Dense parts of the body that x-rays find it more difficult to pass through, such as bone, show up as clear white areas on the image. Softer parts that x-rays can pass through more easily, such as the heart and lungs, show up as darker areas.

How do I prepare my child for an x-ray examination?

You don't usually need to do anything special to prepare your child for an x-ray examination. However, if your child is wearing any metallic objects, such as rings or jewellery, these may need to be removed to improve the quality of the image. Clothing may also need to be removed from the area being x-rayed or your child may need to change into a hospital gown.

What happens during an x-ray examination?

X-ray examinations are usually quick and simple. Your child's x-ray will be performed by a radiographer (a person specially trained in taking x-ray images). You are welcome to stay with your child during the x-ray.

The radiographer will ask some questions to confirm your child's identity and the type of scan being done.

The radiographer will then position the part of your child's body to be examined and line up the x-ray machine. Each x-ray image will take less than a second. Your child may need to hold their breath or remain still for a very short time (a few seconds) to allow us to take a clear image.

To ensure the x-rays are not blurred, we may ask you to assist with holding your child still for the x-ray.

We may also use sponge pads, blocks or other positioning aids to help keep your child in the required position. You may need to wear a protective lead apron if you stay with your child.

The x-ray will be displayed on a computer monitor and the radiographer will check that the image contains all the required information before your child leaves the x-ray department.

How long does an x-ray examination take?

The length of an x-ray examination will vary depending on:

- the age of your child
- how your child cooperates
- how many areas need to be x-rayed

In most circumstances, the entire examination will take less than 15 minutes.

What are the benefits of an x-ray examination?

X-rays can detect problems in the body and can help us to make diagnoses. They can also be used to monitor the progress of existing conditions. Your child's doctor or nurse will decide if they might benefit from having an x-ray.

What happens after the x-ray examination?

When we have finished the x-ray examination, your child will be able to go home, or return to school or childcare, if there is no medical reason for them not to do so.

Are there any risks or side effects?

Your child will not experience any unusual feelings or sensations during or after their x-ray examination. They will be able to return to their normal activities straight away.

Exposure to radiation

We are all exposed to background radiation on a daily basis. Some of it comes from natural sources and some comes from artificial sources. Natural sources of background radiation include:

- cosmic rays - radiation that reaches the Earth from space
- rocks and soil - some rocks are radioactive and give off radioactive radon gas
- living things - plants absorb radioactive materials from the soil and these pass up the food chain

Generally, the amount of radiation your child will be exposed to during an x-ray is equivalent to a few days extra background radiation. Your child will not be exposed to any more x-rays than is absolutely necessary.

Before we carry out any examination using radiation, we will weigh up the benefits of having the examination against the risks of the radiation itself. Exposure to radiation can slightly increase a person's lifetime cancer risk, but for this examination, the risk is very small.

Results

We will send your child's results to the clinician who requested the examination. They will then contact you to discuss the results. If your child's results require urgent attention, we will discuss this with you as soon as possible.

Contact us

If you have any further questions or concerns, please speak to a member of your child's healthcare team who will be happy to explain further.

If you have any questions before the examination, please telephone the children's radiology department.

Telephone: **023 8120 4429** (Monday to Friday, 8.30am to 4.30pm)

Useful links

www.nhs.uk/conditions/x-ray

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For help preparing for your visit, arranging an interpreter or accessing the hospital, please visit www.uhs.nhs.uk/additionalsupport

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