

# General radiology (child patients)

## Information for patients, parents and carers

This sheet aims to provide you and the child you are caring for with information about their radiography (X-ray) examination. If you have any other questions or concerns, please do not hesitate to speak to the team caring for them.

### **Confirming the child's identity**

Before they have a treatment or procedure, our staff will ask you the child's name and date of birth and check their ID band. If they do not have an ID band we will also ask you to confirm their address. If we do not ask these questions, then please ask us to check. Ensuring their safety is our primary concern.



## Why do I need an X-ray?

Hello. I am Dr X. Ray.

I would like you to have an X-ray so I can see inside your body and discover how to make you better. Lots of problems can be seen from outside the body, but not bones or organs.

## What are X-rays?

X-rays are a type of radiation (ra-di-a-tion). This means waves of energy that move, just like sunrays. Because they have more energy, X-rays can pass through things that sunlight cannot – like our bodies.

Different parts of the body stop different amounts of X-rays. The darker an area on the X-ray picture is, the more X-rays have reached it. Bones are able to stop lots of X-rays so they show up white. The different shades help to make a picture of the inside of your body.



## Natural radiation?

X-rays give your body a small dose of radiation. We get a small dose of radiation every day from nature – this is called 'background radiation'. Here are some of the ways we are naturally exposed to radiation:

- Cosmic rays come from space. Most are absorbed by the Earth's atmosphere (at-mos-phere). You get a bit more radiation from cosmic rays when you fly because the atmosphere is thinner. A flight to America is similar to having 6 chest X-rays.
- Many parts of the Earth are naturally radioactive (ra-di-o-ac-tive), which means they produce radiation. Some rocks contain a radioactive material called uranium (u-ra-nium). Some places, like Cornwall, have more rocks like this so people who live there get more background radiation.
- Bananas contain a material called potassium (po-tass-ium), which can give a tiny dose of radiation. However, potassium is also an important part of a balanced diet.

## Radiation risks

X-ray radiation slightly increases the risk of developing cancer many years later in life. Cancer is when the body's instructions for building new cells go wrong and cause bad cells to grow and spread. A child's growing body is more sensitive to radiation than an adult's, and because they have more life ahead of them, there is more time for cancer to develop.

However, the amount of radiation used for X-ray procedures is small. The risks associated are very low.

X-ray images are only ever taken when the benefit to health has been judged to be more important than the risk of harm. The smallest possible amount of radiation is used to produce a good picture.

## What will happen during my X-ray?

You may be asked to wear a hospital gown depending on what part of your body is being X-rayed. Normal clothes may have metal parts, like zips or buttons that will show up white on your picture. This is because they can stop a lot of X-rays. So we don't want them to get in the way.

When you go into the X-ray room you will meet the radiographer (ra-di-og-ra-pher) (a person who takes X-ray pictures). They will look after you during your X-ray.

They will explain what the X-ray is for and what they will do. Then they will ask you to lie on the bed, or stand or sit in front of the X-ray detector. This is so that they take a picture of the right part of your body.

Once you are in position and it's time to take the picture, the radiographer will ask you to stay as still as you can. This is so the picture is not blurry.

There will be a noise while the picture is being taken and then it is all done. You won't feel anything, and it only takes a few seconds. Sometimes, you will be asked to move so another picture can be taken.

When all the pictures are taken, they will be sent to your doctor. The doctor will then tell you what to do next.

## Word search

We hope you have learnt a bit more about the X-ray you will be having. See if you can find the X-ray words below.

M Y O M L L H W R T E M Y P Q  
P U Y Y V Q J F P D V X R O H  
T I I M A G E V N A I R F T H  
H X C N F Z V U I T T A W A A  
U Q X B A H O O B C C Y X S V  
R E H P A R G O I D A R L S S  
I C J D G J U H N V O Z S I E  
V M O K R A D I A T I O N U U  
M S C S B Y A H E Z D W G M S  
E A W D M O T P F I A R P Y S  
B H D K E I N L K A R M G G I  
Y O T R O T C E T E D R D Q T  
Y M O Q F W D R S Z E A H R F  
F J J K Z C M Q A N W A E G H  
F N T H W X V L E Y O Q O B S

Background
Bones
Cosmic ray
Detector
Dose
Energy
Potassium
Radiation
Radioactive
Radiographer
Tissues
Uranium
X-ray

## For more information, please visit

- [Patient dose information: guidance \(www.gov.uk\)](http://www.gov.uk)
- [X-ray \(www.nhs.uk\)](http://www.nhs.uk)
- [General imaging \(kch.nhs.uk\)](http://kch.nhs.uk)
- [Medical radiation: uses, dose measurements and safety advice \(www.gov.uk\)](http://www.gov.uk)

## Before the X-ray procedure

If the child has had a previous reaction to X-ray contrast injections, please let the radiographer know.

## Useful contacts

If you have any further questions please ask a member of staff:

Radiology main reception (telephone):	020 3299 3111
General X-ray department (telephone):	020 3299 1525
General X-ray department (email):	kch-tr.xr_reception_dh@nhs.net

## Sharing your information

We have teamed up with Guy's and St Thomas' Hospitals in a partnership known as King's Health Partners Academic Health Sciences Centre. We are working together to give our patients the best possible care, so you might find we invite you for appointments at Guy's or St Thomas'. To make sure everyone you meet always has the most up-to-date information about the child's health, we may share information about them between the hospitals.

## Care provided by students

We provide clinical training where our students get practical experience by imaging patients. Please tell the child's doctor or nurse if you do not want students to be involved in the child's care. The child's imaging will not be affected by your decision.

## PALS

The Patient Advice and Liaison Service (PALS) is a service that offers support, information and assistance to patients, relatives and visitors. They can also provide help and advice if you have a concern or complaint that staff have not been able to resolve for you. They can also pass on praise or thanks to our teams.

PALS at King's College Hospital, Denmark Hill, London SE5 9RS  
Tel: 020 3299 3601  
Email: kch-tr.palsdh@nhs.net

PALS at Princess Royal University Hospital, Farnborough Common, Orpington, Kent BR6 8ND  
Tel: 01689 863252  
Email: kch-tr.palspruh@nhs.net

**If you would like the information in this leaflet in a different language or format, please contact our Communications and Interpreting telephone line on 020 3299 4826 or email [kch-tr.accessibility@nhs.net](mailto:kch-tr.accessibility@nhs.net)**