

X-RAY

What is an X-ray?

An X-ray is a painless medical test that helps Doctors diagnose a multitude of medical conditions. An X-ray involves exposing a body part to ionising radiation to produce a 2-dimensional image, based on the absorption of x-rays by different tissues.

What does X-ray equipment look like?

The X-ray room will typically consist of an X-ray tube, a table or couch and a wall stand. There is also an operating panel and screen that the Radiographer will stand behind when taking the x-rays.

How does it work?

An x-ray is a very controlled form of radiation which is focussed using an x-ray tube over the area being examined. The tube produces small bursts of radiation which is absorbed to a different degree by different parts of the body producing an image on a special imaging plate. You cannot feel the x-rays and so the procedure itself is painless. However, it is important for the Radiographer to get you into the correct position. Holding this position or lying on the x-ray table may, for some people, feel uncomfortable, but it is only for a very short time. Digital image processing and viewing is commonplace in modern departments to help produce high quality and accurate results.

How do I prepare for my X-ray?

X-ray examinations do not require any preparation. Radiation can be harmful for an unborn baby. If you are or think you may be pregnant you must let us know when we are scheduling your appointment or tell the Radiographer before the x-ray. For some examinations the Radiographer may check your pregnancy status with you before the x-ray.

Please let us know if you have any mobility challenges requiring additional equipment, or other special needs or requirements when making your appointment. This will ensure that we are able to offer you the highest quality service.

What happens when I arrive?

On the day of your examination, you should arrive 15 minutes before your appointment time. You will check in at reception. You will be asked to take a seat in the waiting area until collected by a member of staff. The examination will be explained to you, and you will be given the opportunity to ask any questions.

You will be asked to remove metal objects from the area to be examined or you might be asked to change into a gown.

What happens during the X-ray?

You will be taken into the X-ray room and will either be asked to lay down on a couch or stand against the wall stand for your x-ray. The Radiographer will move you into different positions in order to take the x-ray and will use an imaging plate to capture the image. The x-ray tube will be moved over the body part to be x-rayed.

The x-ray normally only takes a few minutes but can take longer depending on the examination.

What are the risks?

The use of ionising radiation is not entirely risk free. However, x-rays are very low dose procedures and the risks associated with the examination are outweighed by the potential benefits. The Radiographer is responsible for making sure that your dose is kept as low as possible.

As a guide:

Diagnostic Procedure	Effective Dose (mSv)	Equivalent No. of Chest X-rays
Chest X-rays	0.02	1
Abdomen X-ray	0.7	35



On average in Ireland, we receive 4.1 mSv of natural background radiation each year. This is equivalent to having 200 Chest X-rays per year. You should make your doctor aware of other X-rays or scans that you have had recently, as further X-rays might be unnecessary.

What are the benefits?

An x-ray is a quick and easy way for doctors to view and assess a wide range of abnormalities, which can then be treated.

When will I get my results?

The Radiographer will ask you to wait in the department while they check that the x-rays taken are of sufficient quality and that no further images are required. If additional x-rays are not needed, you will be free to leave the department. The Radiographer will tell you how to get your results and how long it will take, as this may be slightly different for each patient. These images will be reviewed by a Radiologist who will report on the findings of the scan. This report will be sent to your doctor. Who will then discuss the findings with you and decide on treatment required, if any.

Please note that we will not be able to discuss your results directly with you. Only your referring doctor can do this.

