#### What are X-Rays?

X-Rays are a type of radiation that can pass right through your body, and an X-Ray image is like a photograph of your bones or other internal organs. The X-Ray image provides valuable information about your health and plays an important role in helping your doctor decide how to treat your illness or condition.

The examination itself only takes a few seconds, during which you may be asked to lie on a table, or stand against an upright frame which holds the imaging plate. It is important to note that Xrays are only present for the few seconds during which the Radiographer presses the exposure switch, and X-rays do not remain in the room or in your body following the exposure.

You may be asked to remove jewellery or to change into a gown for the examination. There is no discomfort or side effects, but you may be asked to stay still or to hold your breath during the examination. You should inform the Radiographer if you have recently had a similar X-ray examination.

You may have to remain in the waiting area after the examination while the Radiographer checks your X-rays, as additional X-rays may be required in different positions.

#### When will I get the results?

A Radiologist (i.e. a doctor who specialises in reading X-Rays) will forward a report to your GP or Hospital Consultant.

#### Are there any risks?

X-rays are a type of ionising radiation and exposure to a large dose of radiation can be harmful. The radiation dose received when undergoing an X-ray examination depends on the part of the body being examined, but it is typically a small fraction of the annual dose from environmental sources. The dose therefore represents a very low risk and the benefit of having the x-ray examination far outweighs that risk.

Typical Radiation Doses	
	Dose
Examination or Exposure Source	(mSv)
Annual Natural Background	3
Radon in the Home & Workplace	2
Transatlantic Flight	0.1
Chest X-Ray or Extremity (e.g.	0.02
knee)	
Mammogram	0.4
Abdomen or Pelvis	1
Lumbar Spine	2.4
СТ	10

#### <u>Is there a limit to the number of x-rays I can</u> receive?

You will only receive the number of X-Rays necessary to provide the information requested by your doctor.

#### Is it safe for children to have an X ray?

Children are more sensitive to radiation harm than adults. Therefore, particular care is taken to make sure that the requested X-rays are justified and that the benefits of the examination always outweigh the risks.

#### Can I bring a relative/friend or carer?

Yes, but for reasons of safety, they will not be able to accompany you into the examination room, except in very special circumstances such as where a young child or a baby is having an Xray (see section on Carers overleaf).

#### **Carers**

A carer, who remains in the X-ray room during the procedure, may receive a radiation dose. This will be a small fraction of the dose received by the patient and represents a very low risk.

In order to ensure that the dose to the carer is as low as possible, the Radiographer will ask you to wear a lead protective apron and will instruct you on how to position yourself during the procedure so as to minimise your dose.

Pregnant or potentially pregnant women should not act as carers. If you think you might be pregnant you should inform the Radiographer, and an alternative carer should be arranged.

If you have acted as a carer recently, or if the person you are helping requires frequent X-rays, you should inform the Radiographer. It is advisable in these circumstances to use an alternative carer for subsequent repeat X-rays.

For the same reason, staff members should not normally act as helpers because of the potential for frequent exposures.

### **Ladies**

If you are a female of childbearing age and you think that there is a possibility that you are pregnant, you should inform the Radiographer.

For certain (higher dose) examinations, you may be asked the date of your last period so the possibility of pregnancy can be ruled out. If your period is overdue or you are pregnant, the examination may be re-arranged.

If you are pregnant, some examinations may proceed where the benefits of the examination outweigh the risk and your doctor considers the X-ray examination too important to postpone. Precautionary measures can be taken to minimise exposure to your unborn child.



Radiology Department St. Luke's Hospital Kilkenny Telephone 056 0567785227

# X-Rays:

## What Patients & Carers Need to Know

Your doctor has arranged for you to have an X-Ray. This leaflet will answer some of the questions you may have about the examination.



X-rays demonstrate internal structures in various shades of grey. The grey is lighter in dense areas that absorb more X-rays (bone) and darker in areas that absorb less (soft tissue).