X-ray

Radiology Tasmania

Patient Information

What is an X-ray?

An X-ray examination is used to create images of body structures to help diagnose conditions or injuries.

A special machine emits a small amount of ionising radiation similar to radio waves and microwaves. X-ray radiation has a very high energy level that allows the X-ray beam to penetrate through the body and is absorbed differently by different structures or parts in the body to create an image. A dense structure like bone absorbs a high percentage of the X-ray beam which appears light grey on the image, whilst low density structures like soft tissues absorb a small percentage which appears as dark grey on the image.

An X-ray is a very common examination and has many uses including:

- Diagnosis of fractures and other bone injury
- Diagnosis of bone or joint conditions such as arthritis
- Diagnosis of chest conditions such as pneumonia or emphysema
- Detection of foreign objects.

What happens during an X-ray?

Before your X-ray examination the radiographer (trained health professional) will ask you questions about why you have come for an X-ray. They will then explain the procedure and answer any questions you may have before proceeding with the examination.

Depending on the area being examined you may be asked to remove jewellery, undress and wear a patient gown.

You will then either be asked to sit, stand or lie against an x-ray plate or on the examination table depending on which area is being investigated.

The radiographer will then ask you to stay completely still and may ask you to hold your breath for a couple of seconds as each x-ray is taken. Any movement may create a blurred image.

X-ray examination times are very quick, usually 10 minutes, but examination times vary depending on the area being examined. Our reception staff will be able to give you an approximate time when booking the appointment.

A report will be sent to you Doctor within 24 hours.

What are the risks of an X-ray?

The only risk associated with this examination arises from the very small dose of radiation from the X-ray unit. Your referring doctor will consider this risk against the diagnostic benefit before referring you for this procedure.

Doses used in diagnostic imaging are very low, and continue to decrease as technology advances.

At Radiology Tasmania we adhere to the ALARA principle, meaning we always use doses As Low As Reasonably Achievable to produce your X-rays.

As a rough guide, a patient would need to have approximately 38 chest X-rays to receive an amount of radiation similar to that of normal background radiation that everyone receives in one year from the environment.

Information is from Inside Radiology, Royal Australian and New Zealand Collage for Radiology (RANZCR)