

Radiation risks from common X-ray examinations: information for patients

You have been referred to the Royal Berkshire NHS Foundation Trust X-ray (Radiology) Department for an X-ray examination which your doctor has requested in order to proceed with your diagnosis and treatment. We are legally obliged to inform you of the small risk from the X-rays.

What are the risks of X-rays?

People are often concerned about being exposed to radiation during an X-ray examination. However, the part of your body being examined will only be exposed to radiation for a brief time, usually for a fraction of a second.

The amount of radiation you receive from an X-ray examination is equivalent to between a few days to a few years of exposure to the levels that we all receive from **natural background radiation**. For examples of typical doses, please see the table below.

Being exposed to X-rays does carry a risk of causing cancer many years or decades later, but this risk is thought to be very small. Visit [GOV.UK: patient dose information](https://www.gov.uk/patient-dose-information) for more information.

It is important to understand that for an individual X-ray examination, the potential health benefit to you will always outweigh the small risk from the X-rays.

The table below is a simple guide to the levels of radiation for various examinations.

*Examination Plain (normal X-rays)	*Equivalent natural background radiation
Limbs and joints and chest	A few days
Skull and cervical spine (neck)	1 – 2 weeks
Hip [†]	7 weeks
Thoracic spine, pelvis [†] and abdomen [†]	4 months
Lumbar spine [†]	7 months
Barium based studies [†]	8 – 16 months
Kidney and bladder studies [†]	14 months
Computed Tomography (CT scans)	
Head	1 year
Chest	3.6 years
Abdomen [†] /pelvis [†]	4.5 years
Chest, abdomen [†] and pelvis [†]	8 years

**Public Health England – Guidance on Dose from Medical X-rays September 2008*

Female and AFAB patients: If you are, or think you may be pregnant, **you must tell the radiographer before being X-rayed**. This is particularly important for some examinations[†] (see above table) and the radiographer (health professional performing the X-ray) may need to make further checks before you are X-rayed as there could be a small risk to an unborn child.

If you have any concerns regarding your X-ray examination or need more information, please ask the radiographer before being X-rayed.

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