



Information about x-ray examinations

Institute of Medical Imaging and Interventional Radiology

Dear patients and parents,

You have been referred to us for x-ray examination. This leaflet gives some basic information about the process and helps prepare you. Please read it carefully and in full before your examination, for your own safety and that of our staff. You are welcome to ask any further questions you may have in connection with this procedure.

The x-ray examination

To help identify possible injuries or pathological changes in your bones, organs or tissue, your attending doctor has recommended diagnostic imaging by x-ray.

The x-rays used for this are generated in an x-ray tube, which is covered with a lead casing and only has a small opening that allows a limited amount of x-ray radiation out.

Focused x-rays are passed through the tissue and create "shadow images" behind the body on a digital recording system (the rays become fainter depending on the nature of the tissue; e.g. more for bones, less for lung tissue). Fluoroscopy uses x-ray imaging to track the movement of organs and show this on a screen.

You will be asked to sit, stand or lie down in a position that allows an x-ray image of the relevant part of the body to be captured in a digital recording system. It only takes fractions of a second to make the images; fluoroscopy may take a few minutes (e.g. for abdominal x-rays). The amount of time needed for analysis and interpretation of x-ray images after the examination may vary.

Alternatives:

If other methods of investigation offer a realistic alternative, e.g. ultrasound, endoscopy, computer tomography (CT),

magnetic resonance tomography (MR), or any of these in combination with x-ray examination, the advantages and disadvantages of these methods will be explained to you in detail, particularly with regard to any possible exposure to side-effects or risks.

X-ray safety

Modern x-ray equipment such as that used in our institute provides high-quality imaging using the **lowest possible dose of radiation** in combination with digital receptor systems. Where necessary and practicable, any parts of the body that are not being examined are protected from exposure to radiation (e.g. by covering the womb and ovaries, or testes, with a lead apron). In some cases the lead apron cannot be used, for diagnostic reasons.

The **medical justification for x-ray examination** can only be made by a doctor with the appropriate specialist knowledge of radiological protection, and then only if the enhanced information provided by x-ray significantly outweighs the slight risk of the exposure to low-level radiation. In some instances the radiologist may decline to perform an x-ray examination, in accordance with the current x-ray safety regulations, or may suggest an alternative. In this case you will be given a full explanation.

If there is any **possibility you might be pregnant**, it is essential you let us know. In this case x-ray examination must be avoided.

Before the examination please remove any items that might compromise the image quality (e.g. hair clips, necklaces, jewelry, dental braces, bra). **Please do not move while the x-ray is being taken, as this can result in a blurred image or the need to repeat the process.**

Please follow the instructions given by the medical technicians.

X-rays



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If an x-ray has been refused

I do not consent to the examination suggested. I have read and understood the information leaflet, and have been specifically informed that x-ray examination could significantly delay and/or impede the diagnosis and treatment of a potential illness/injury, with negative effects on my health. For this reason an alternative method should be used for the investigative examination required.

If there is
any possibility you might be
pregnant
it is essential
you let us
know!

Signed by the patient / patient's legal representative

Place, date, time

Signed by the doctor

Consent

I have read and understood the information leaflet. I have had the opportunity to ask any questions I wished to. My questions were answered fully and clearly. I feel sufficiently informed, have considered my decision carefully and do not need any more time to think about it. **I consent to the x-ray examination that has been recommended.** I will comply with the guidance on how to behave.

Signed by the patient / patient's legal representative

Place, date, time

Signed by the doctor

If only one parent signs this consent form, this also constitutes confirmation that he/she is the sole guardian of the child concerned, or that he/she has the consent of the other parent to do so. For major procedures the consent form should in principle be signed by both parents/legal guardians.