

X-ray

An X-ray is a quick, painless test that produces images of the structures inside your body — particularly your bones.

X-ray beams pass through your body, and they are absorbed in different amounts depending on the density of the material they pass through. Dense materials, such as bone and metal, show up as white on X-rays. The air in your lungs shows up as black. Fat and muscle appear as shades of gray.

Why is it done ? X-ray technology is used to examine many parts of the body.

Bones

- **Fractures and infections.** In most cases, fractures and infections in bones and teeth show up clearly on X-rays.
- **Arthritis.** X-rays of your joints can reveal evidence of arthritis. Repeat x-rays taken over the years can help your doctor determine if your arthritis is worsening.
- **Osteoporosis.** Special types of X-ray tests can measure your bone density.
- **Bone cancer.** X-rays can reveal bone tumors.

Chest

- **Lung infections or conditions.** Evidence of pneumonia, tuberculosis or lung cancer can show up on chest X-rays.
- **Breast cancer.** Mammography is a special type of X-ray test used to examine breast tissue.
- **Enlarged heart.** This sign of congestive heart failure shows up clearly on X-rays.
- **Blocked blood vessels.** Injecting a contrast material that contains iodine can help highlight sections of your circulatory system to make them visible on X-rays.

Abdomen

- **Digestive tract problems.** Barium, a contrast medium delivered in a drink or an enema, can help reveal problems in your digestive system.
- **Swallowed items.** If your child has swallowed something such as a key or a coin, an X-ray can show the location of that object.

Radiation exposure

Some people worry that X-rays aren't safe because radiation exposure can cause cell mutations that may lead to cancer. The amount of radiation you're exposed to during an X-ray depends on the tissue or organ being examined. Sensitivity to the radiation depends on your age, with children being more sensitive than adults.

Generally, however, radiation exposure from an X-ray is low, and the benefits from these tests far outweigh the risks.

However, if you are pregnant or suspect that you may be pregnant, tell your doctor before having an X-ray. Though the risk of most diagnostic X-rays to an unborn baby is small, your doctor may consider another imaging test, such as ultrasound.

How to prepare:

Please tell the technologist if you have an insulin pump.

What to expect during the test: X-rays are performed at doctors' offices, dentists' offices, emergency rooms and hospitals — wherever an X-ray machine is available. The machine produces a safe level of radiation that passes through your body and records an image on a specialized plate. You can't feel an X-ray.

A technologist positions your body to obtain the necessary views. He or she may use pillows, sponges, or sandbags to help you hold the position. During the X-ray exposure, you remain still and sometimes hold your breath to avoid moving so that the image doesn't blur.

An X-ray procedure may take just a few minutes for a simple X-ray or longer for more-involved procedures.

What to expect after the test:

- you can resume your usual activities and normal diet immediately.
- The results of your exam should be available to your physician within 24-48 hours after the test, Monday through Friday.
- Your physician will discuss the test results with you.