The chest x-ray is the most common medical imaging examination. During this procedure, an image of your heart and lungs is produced when a small amount of radiation passes through your body and is recorded on special film or a computer. A chest radiograph often is performed as part of a routine physical examination, and it also may be performed to reveal or rule out conditions such as pneumonia, congestive heart failure, tuberculosis or other lung and heart conditions.

**Patient Preparation**

Wear a comfortable, 2-piece outfit on the day of your chest radiograph. Schedule at least 20 to 30 minutes for the exam, which includes time for preparation, processing the radiographic images and obtaining additional images, if necessary. The actual exposure time is very short.

Before your examination, a radiographer will explain the procedure to you and answer any questions you might have. A radiographer, also known as a radiologic technologist, is a skilled medical professional who has received specialized education in anatomy, radiation protection and patient care. As part of his or her duties, the radiographer will determine the amount of radiation necessary to produce a diagnostically useful image.

Prior to performing your examination, the radiographer may give you a hospital gown to wear. This gown has no metal snaps on it, because metal can interfere with the accuracy of the image. It is important that you remove everything from the waist up, including bras, undershirts, necklaces and other jewelry. If you have long hair and it is in a low ponytail, the elastic band or barrette may have to be removed as well.

If you are a woman of childbearing age, the radiographer will ask if there's any possibility you are pregnant. It is important that you tell the radiographer the date of your last menstrual period and if there is a chance that you are pregnant.

**During the Examination**

Inside the examination room, the radiographer will either hang a lead shield behind you at waist level or give you a rubberized apron to tie around your waist. The thick rubber will protect your reproductive organs from direct x-rays.

The radiographer will ask you to stand in front of an x-ray unit positioned at chest level. You will be asked to place your hands on your hips, roll your shoulders forward and lift your chin. The radiographer then will ask you to take a deep breath, exhale, and then take another deep breath and hold it. It's important to hold your breath because any movement of your lungs will blur the x-ray image. The radiographer will make the x-ray exposure and let you know when you can exhale.

Another radiograph will be taken of the side view of your chest. Usually, you will be asked to turn to the side, then raise your arms over your head and hold them in an upright position. Raise your chin again and hold your breath while the exposure is made. The radiographer will let you know if more images are necessary.

If you are unable to lift your arms over your head, lift your chin or comply with any other instructions, be sure to tell the radiographer. His or her job is to give you the best care possible.

The radiographer then will determine if your radiographs are technically acceptable. If they are not, you may be asked to repeat the examination.

The radiographs of your chest then will be given to a radiologist — a physician trained to evaluate medical images.

**Postexamination Information**

After your radiographs have been reviewed by a radiologist, your personal physician will receive a report and advise you of the results.

The radiation that you are exposed to during this examination, like the radiation produced during any other x-ray procedure, passes through you immediately.◆

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