

Diagnostic x-rays can give the doctor important and even life-saving information about a person's medical condition. But like many things, diagnostic x-rays have risks as well as benefits. They should be used only when they will give the doctor information needed to treat you.

You'll probably never need an abdominal x-ray during pregnancy. But sometimes, because of a particular medical condition, your physician may feel that a diagnostic x-ray of your abdomen or lower torso is needed. The risk to you and your unborn child is very small, and the benefit of finding out about your medical condition is far greater. In fact, **the risk of *not* having a needed x-ray could be much greater than the risk from the radiation.** But even small risks should not be taken if they're unnecessary.

You can reduce those risks by telling your doctor if you are, or think you might be, pregnant whenever an abdominal x-ray is prescribed. If you are pregnant, the doctor may decide that it would be best to cancel the x-ray examination, to postpone it, or to modify it to reduce the amount of radiation. Or, depending on your medical needs, and realizing that the risk is very small, the doctor may feel that it is best to proceed with the x-ray as planned. In any case, you should feel free to discuss the decision with your doctor.

What Kind of X-Rays Can Affect the Unborn Child?

During most x-ray examinations - like those of the arms, legs, head, teeth, or chest - your reproductive organs are not exposed to the direct x-ray beam. So these kinds of procedures, do not involve any risk to the unborn child. However, x-rays of the mother's lower torso - abdomen, stomach, pelvis or lower back - may expose the unborn child to the direct x-ray beam. They are of more concern.

What Are the Possible Effects of X-Rays?

There is scientific disagreement about whether the small amounts of radiation used in diagnostic radiology can actually harm the unborn child, but it is known that the unborn child is very sensitive to the effects of things like radiation, certain drugs, excess alcohol, and infection. This is true, in part, because the cells are rapidly dividing and growing into specialized cells and tissues. If radiation or other agents were to cause changes in these cells, there could be a slightly increased chance of birth defects or certain illnesses, such as leukemia, later in life.

It should be pointed out, however, that the majority of birth defects and childhood diseases occur even if the mother is not exposed to any known harmful agent during pregnancy. Scientists believe that heredity and random errors in the developmental process are responsible for most of these problems.

What If I'm X-Rayed Before I Know I'm Pregnant?

The possibility of any harm to you and your unborn child from an x-ray is very small. There are, however, rare situations in which a woman who is unaware of her pregnancy may receive a very large number of abdominal x-rays over a short period. Or she may receive radiation treatment of the lower torso. Under these circumstances, the woman should discuss the possible risks with her doctor.

How You Can Help Minimize the Risks

- **Most important, tell your physician if you are pregnant or think you might be.** This is important for many medical decisions, such as drug prescriptions and nuclear medicine procedures, as well as x-rays. And remember, this is true even in the very early weeks of pregnancy.
- Occasionally, a woman may mistake the symptoms of pregnancy for the symptoms of a disease. If you have any of the symptoms of pregnancy - nausea, vomiting, breast tenderness, fatigue - consider whether you might be pregnant and tell your doctor or x-ray technologist (the person doing the examination) before having an x-ray of the lower torso. A pregnancy test may be called for.
- If you are pregnant, or think you might be, do not hold a child who is being x-rayed. If you are not pregnant and you are asked to hold a child during an x-ray, you will be given a lead apron to protect your reproductive organs. This is to prevent damage to your genes that could be passed on and cause harmful effects in your future descendants.
- Feel free to talk with your doctor about the need for an x-ray examination. You should understand the reason x-rays are requested in your particular case.

**Distributed by the Food and Drug Administration, The American College of Obstetricians and Gynecologists, and the American College of Radiology
Department of Health and Human Services
Public Health Service
Food and Drug Administration
Rockville, MD 20857
HHS Publication No. (FDA) 94-8087**