

BARTH FAMILY DENTISTRY, PSC
Dr. Charity A. Barth
1821 Florence Pike, St. #2, Burlington, KY 41005
Phone: (859) 689-7700

X-rays During Pregnancy

I had a whole series of dental x-rays at my dental appointment before I found out I was pregnant. Could this have hurt my baby?

Don't worry! First of all, dental x-rays are directed far away from your uterus. Second, a lead apron shields your uterus and your baby effectively from any radiation. Determining the safety of other types of x-rays during pregnancy is more complicated, but it is clear that diagnostic x-rays rarely pose a threat to the embryo or fetus. Three factors affect whether or not radiation from x-rays might be harmful.

- **The Amount of Radiation:** Severe damage to the embryo or fetus occurs only at very high doses (50 to 250 rads). No damage appears to occur at doses lower than 10 rads during a typical diagnostic exam, such exams should not present a problem in pregnancy
- **When the Exposure Occurs:** Even at high doses, there appears to be no teratogenic risk to the embryo before implantation (the sixth to eighth day post-conception). There is a somewhat more risk of damage during the period of early development of a baby's organs (the third and fourth weeks after conception), and some continued risks of damage to the central nervous system throughout pregnancy. But again, only at HIGH doses.
- **Whether There Is Actual Exposure of Uterus:** Today's x-ray equipment is able to precisely pinpoint the area that needs to be viewed, which protects the rest of the body from radiation exposure. Most x-rays can be done with the mother's abdomen and pelvis, and thus the uterus, shielded by a lead apron. But even an abdominal x-rays is unlikely to be hazardous, since it practically never delivers more than 10 rads.

Of course it still isn't wise to take unnecessary risks, no matter how small, it's usually recommended that elective x-rays be postponed until after delivery. Necessary risks are another matter entirely! Since the likelihood of damage to the fetus from the x-ray exposure is extremely slight, the health of the expectant mother or the fetus shouldn't be endangered by putting off an x-ray that is genuinely needed for diagnosis and/or treatment. In some cases, not having the x-ray done while an infection of a tooth is occurring may be more harmful to the fetus than having the x-ray done. For a dental x-ray is mandatory to properly diagnosis and treat a dental infection. If that dental infection is not diagnosed and treated properly, the infection itself cause harm to the mother and/or fetus. Bottomline, the benefit of the x-ray must out weigh the risk of the x-ray to the mother and/or fetus.

Documented from: "*What To Expect When You're Expecting*" By: Arlene Eisenberg, Heidi E. Murkoff, Sandee E. Hathaway B.S.N and Dr. Richard Aubry of New York Obstetrics.