

# Safely Imaging Pregnant/Breast Feeding Patients



Based on the current information available, Iowa Radiology supports safely imaging pregnant women with CT and MRI exams when medically necessary.

## CT

According to the ACR 2008 Appropriateness Criteria & American Council of Obstetricians and Gynecologists:

"Women should be counseled that x-ray exposure from a single diagnostic procedure does not result in harmful fetal effects. Specifically, exposure to <5 rad (50mGy) has not been associated with an increase in fetal anomalies or pregnancy loss."

Standard single CT scan through the gravid uterus results in a fetal dose of 25 mGy or less (exposure of >150mGy - counsel mother about possible therapeutic abortion). At this dose there is no risk of teratogenic effects to the fetus. The only risk to the fetus is a small increased risk of cancer (specifically small increased risk of childhood cancer ~1% for an exposure of 25 mGy).

Intravenous and oral contrast may be given as necessary for CT.

\*\*Exposure of the newborn child to 10mGy of ionizing radiation increases the absolute lifetime risk of developing cancer by 0.4% and exposure to 50 mGy increases the absolute lifetime risk of developing cancer by 2%.

## MRI

MRI at 1.5T or less is safe in ALL trimesters of pregnancy.

Gadolinium should NOT be administered.

Gadolinium will cross the placental barrier and animal studies have shown congenital anomalies in utero.

## Breast Feeding

According to the 2015 ACR Manual on Contrast Media, it should be safe for the mother and infant to continue breastfeeding after receiving iodinated or gadolinium-based contrast agents. However, if the mother prefers, she may choose to pump and discard the breast milk for 12-24 hours before resuming breast feeding.

Reviewed by Dr. Keller 4/2016

\*Subject to change at the discretion of the radiologist due to clinical circumstances.\*