Magnetic Resonance Imaging (MRI)

This sheet is about exposure to magnetic resonance imaging (MRI) in pregnancy and while breastfeeding. This information is based on available published literature. It should not take the place of medical care and advice from your healthcare provider.

What is magnetic resonance imaging (MRI)?

Magnetic resonance imaging, known as MRI, is a medical procedure that has been used to create pictures of the inside of the body to diagnose some diseases or conditions. An MRI can also create images of a pregnancy and give healthcare providers a view of the placenta (the organ that grows in the uterus during pregnancy), and organs in the fetus, like the brain, lungs, and abdomen (belly).

MRI does not use ionizing radiation like an x-ray or computer-assisted tomography (CT) scan. Instead, MRI uses a magnetic field and radio waves. A typical MRI scan lasts from 20 to 90 minutes. MRIs are painless and are not expected to cause any tissue damage.

Can having an MRI make it harder for me to get pregnant?

It is not known if MRIs can make it harder to get pregnant.

I am pregnant. What if I need an MRI?

If you are pregnant or think that you could be pregnant, tell your healthcare provider and the radiologist or MRI technologist before having an MRI done. The American College of Obstetricians and Gynecologists (ACOG) and the American College of Radiology (ACR) have stated that women who are pregnant can have an MRI done during any trimester of a pregnancy.

Does having an MRI increase the chance of miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. Studies have not been done to see if having an MRI could increase the chance of miscarriage.

Does having an MRI increase the chance of birth defects?

Every pregnancy starts out with a 3-5% chance of having a birth defect. This is called the background risk. One study that looked at more than 1,700 pregnancies exposed to MRI during the first trimester did not find an increased chance of birth defects.

The MRI machine makes loud sounds. There has been interest in knowing if the MRI could affect fetal hearing. Several small studies have not reported hearing damage with exposure to MRI during pregnancy.

Would having/getting an MRI increase the chance of other pregnancy-related problems?

Some studies have reported that having an MRI in pregnancy is not expected to affect the growth (size) of a fetus. MRI has not been well-studied to see if it can increase the chance for other pregnancy-related problems, such as preterm delivery (birth before week 37).

Does an MRI in pregnancy affect the future behavior or learning for the child?

Studies have not been done to see if an MRI during pregnancy can increase the chance of behavior or learning issues for the child.

Breastfeeding and MRIs:

Because the MRI only uses magnetic fields and radio waves to get images, there are no concerns about having this procedure done while breastfeeding. Breastfeeding can resume after the MRI.

If a man has an MRI, could it affect fertility or increase the chance of birth defects?

Studies have not been done to see if an MRI could affect a man’s fertility (ability to get a woman pregnant) or increase

the chance of birth defects. In general, exposures that men have are unlikely to increase risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures at https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/.

Please click here for references