

# MRI Safety and Risks in Children

## Are there any health risks with an MRI?

**No.** Magnetic Resonance Imaging (MRI) is a very safe form of imaging. There are no known health risks from MRI scanning, and all risks related to the magnet can be avoided and prevented with appropriate safety precautions. To ensure your safety, our team will review these safety precautions with you and screen you for any potential hazards.

*“MRI does not pose any risks unless your child has any kind of implanted metal objects in the body.” – Stanford Children’s Health*

Some types of MRI used for medical purposes may pose a slight increased risk due to the use of dyes injected into the body or the use of sedation. You may hear of risks associated with MRI in combination with these factors. Our study does not use contrast dyes or sedation.

## Does MRI expose my child to radiation?

**No.** Unlike other forms of imaging you may be familiar with, MRI uses no radiation or radioisotopes to produce images. Instead, MRI uses magnetic fields and the properties of water within the body to generate detailed three-dimensional anatomical images.

*“Because MRI does not use x-rays or other radiation, it is the imaging of choice [for] frequent imaging... especially in the brain.” – National Institute of Biomedical Imaging and Bioengineering*

## Are MRIs safe for children?

*“MRIs... pose no greater physical or psychological harm to healthy children than routine activities such as playing sports or riding in a car.”*

*– U.S. News Report*

**Yes.** Studies show that simple MRIs, such as those used in our study, are safe for children. In fact, many common children's activities such as playing team sports pose a higher safety risk than MRI.

Additionally, repeated MRIs over the span of a longitudinal study produce no measureable adverse effects on the development of children.

## Further reading



Magnetic Resonance Imaging (MRI). (National Institute of Biomedical Imaging and Bioengineering.) <<https://www.nibib.nih.gov/science-education/science-topics/magnetic-resonance-imaging-mri#946>>



“Simple MRIs Safe for Children, Study Says” (U.S. News) Oct 7, 2011 <<http://health.usnews.com/health-news/family-health/allergy-and-asthma/articles/2011/10/07/simple-mris-safe-for-children-study-says>>



“Data on the safety of repeated MRI in healthy children” (NeuroImage Clinical). Jan 13, 2014 <<http://www.sciencedirect.com/science/article/pii/S221315821400014X>>