

YOUR CHILD'S CARDIAC MRI

MRI is short for Magnetic Resonance Imaging. It is done using a special machine called an MRI scanner. The scan is painless. The MRI scanner takes pictures of your child's heart and nearby blood vessels using a magnet and radio waves.

A cardiac MRI is needed to take a closer look at your child's heart condition. An MRI does not use X-rays or radiation.

WHAT SHOULD I EXPECT?

IV placement

Your child will have an IV placed before the MRI scan.

- Many children have fears of needles or shots. The medical team may have different options to help numb your child's skin that makes the IV placement easier.
 You can ask about numbing options for your child.
- The IV is used for a medicine called "contrast" that helps take better pictures of your child's heart and blood vessels so that images can be taken.

Inside the MRI suite

• After you arrive and check in, your child will get a hospital gown to wear during the procedure.

- Your child will be asked to remove anything metal (such as watches, metal hair clips, rubber bands, earrings or jewelry).
- A technologist will put stickers (ECG leads) on your child's chest and back.
- The technologist will also check your child's height and weight.

In the MRI scanner room

Next, the technologist will take you and your child to the MRI scanner room. The scanner looks like a bed in a tunnel. Your child will be asked to lie down on the bed. A shield shaped camera will be placed over your child's chest and stomach. It does not hurt, and helps to take better pictures of the heart. During the scan, the table (bed) will slide into the tunnel. Your child may bring a stuffed toy or other small comfort item (as long as there is no metal in it.)

During the MRI scan

A technologist will monitor your child during the entire scan. There is a window and an intercom so the technologist can give instructions to your child.

If you will be staying with your child during the MRI scan, the technologist will have you change into a hospital gown and complete a MRI screening sheet to ensure that it is safe. No pregnant caregivers will be allowed to stay during the MRI scan. If you choose to be in the room with your child, you will not be able to talk to your child until the scan is complete.

For your child during the MRI

- Your child needs to lie still during the scan.
- Your child's head will be towards the tunnel. Most of your child's body will be inside the tunnel in the center of the scanner.
- The scanner makes loud beeping, buzzing and clicking noises. Most children can wear headphones to listen to music during the scan.
- The scanner will not touch your child's body. Only the shield shaped camera will be laying over your child's chest and stomach during the scan.
- At times, during the MRI, the technologist may ask your child to hold his or her breath for short periods (10 to 20 seconds). It is important that your child follow these instructions. It will help take clearer pictures of the heart.

How long it takes

The MRI may last 45 to 90 minutes.

Getting the results

The medical team will review the images and your child's cardiologist will call you to talk about the results, usually within several days.

HOW DO I EXPLAIN THE MRI TO MY CHILD?

It is important that you talk to your child before the appointment to prepare for this scan. Learning and understanding what to expect helps children cope better before, during and after the medical procedure.

Please read "Preparing Your Child for a Cardiac MRI or CT Scan" for more guidance on talking to your child about the procedure.

Here are some free apps you can download to help prepare your child for the MRI.

Okee (available on Android, iPad and iPhone) can help a child under 8 years old understand the MRI scan and prepare for what the scan might be like.

- This app has games to help prepare your child for the noises the scanner makes. It also teaches ways to breathe as needed during a heart scan.
- Your child can watch a video to understand what to do during a MRI.

Siemens (available on iPad) has an app for children 8 years old and up. It has a 360-degree virtual MRI scan that includes the normal sights and sounds during the scan. The app includes information about how an MRI works and gives examples of different MRI pictures.

WHAT IF I FEEL LIKE MY CHILD NEEDS MORE HELP?

You can call the Kentucky Children's Hospital Child Life Department at (859) 323-6551. Child Life Specialists can help your child and other family members prepare for and cope with procedures the day of the appointment. It is important to call if:

- Your child has developmental delays or other special needs.
- Your child has had difficult or traumatic hospital experiences.
- Your child has a lot of anxiety about the procedure.
- You are unsure if your child can complete the MRI scan awake.