

# Magnetic Resonance Imaging (MRI) Scan

## What is an MRI scan?

An MRI scan uses radio waves and a magnetic field rather than x-rays to take pictures of your baby's body. The MRI scanner is a hollow machine with a tube running horizontally through its middle. Your baby will lie on a bed that slides into the tube. An MRI scan usually lasts between 20 minutes up to an hour.



MRI scanner

## How is the scan done?

The neonatal team will prepare and take your baby for the scan. They will also help to settle your baby and make sure they are safe. Depending on your baby's needs this can take time.

Your baby will need to lie very still for this scan and we will wrap your baby, as this can help to settle them and keep them warm. If your baby is feeding we will aim to give them a feed half an hour before leaving NICU. If your baby becomes unsettled it may be necessary to give them a top-up feed or sucrose.

If it is not possible for your baby to remain still enough or if your baby is requiring breathing support, it may be necessary to give them a general anaesthetic (the medical staff will discuss this with you).

Your baby will need to lie on the bed for the scan.

Your baby will likely need additional detectors placed around the part of the body being scanned. This will often need additional padding. The detectors do not directly touch the head, if that is the part being scanned, but the padding will.

When your baby is in the correct position, the MRI technologist will move the bed inside the scanner and then go into the control room. The neonatal team or anaesthetists will monitor your baby's vital signs and can see your baby through the windows. The scan will be interrupted if your baby needs any adjustments.

You are welcome to go with your baby to the MRI scanning area, however you will be asked to wait outside in the waiting room while the scan is being done.

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## **Are there any risks?**

There are minimal risks associated with MRI scans. They are painless with no lasting effects. The scanner does not touch your child during the scan.

The noise during the scan can be quite loud and can sound like continuous knocking. We will give your baby ear protectors to minimise any discomfort.

MRI scans are not suitable for people with any metal inside them (pacemakers, surgical clips or metallic implants) because the scanner emits a strong magnetic field. If your baby is wearing clothes, we will check that there are no metal domes or zips.

Before the scan starts, the nurse or radiographer will check your baby does not have a pacemaker, metal implants or clips, dental braces, a history of metal fragments in the eyes or any allergies. You will then be asked to sign a form to confirm this.

Some scans need a contrast injection to help an area show up more easily. If this is necessary, the medical staff will explain this to you and get you to sign a consent form. They will need to insert an IV line (small plastic tube) into your baby before the scan.

## **When will the results be available?**

The radiologist (Doctor who studies MRI scans) will review the images once processed. The radiologist will provide a report to the medical staff looking after your baby. The medical staff will discuss the results with you. This may take a few days. Sometimes these reports take longer, if other experts are involved.