

FACTSHEET



This fact sheet is for education purposes only. Please consult with your doctor or other health professionals to make sure this information is right for your child. If you would like to provide feedback on this fact sheet, please visit: <https://www.schn.health.nsw.gov.au/fact-sheets/feedback-form>.

Nuclear Medicine DMSA Scan

What is a DMSA scan?

A DMSA scan is used to assess the location, size, shape and function of the kidneys.

A DMSA scan can help assess various conditions that affect the kidneys such as:

- Scarring from infections or urinary reflux
- Pyelonephritis
- Ectopic renal tissue
- Infarction
- Horseshoe kidney
- Renal failure
- Multi-cystic dysplastic kidneys
- Renal trauma



How can I prepare my child for a DMSA scan?

There is no special preparation for a DMSA scan, your child may eat and drink prior to the test.

It is helpful prior to the test if you:

- Explain to them why the test is needed and reassure them that you'll be with them every step of the procedure.
- Bring along their favorite toy, movie, object that provides them comfort (blanket, teddy, dummy etc.).
- Arrive 30 minutes prior to your scheduled appointment if your child needs numbing cream for the injection site.
- Please call to discuss the many options available to help your child get through their scan if they are anxious, or if you feel like they need a little extra support.

What happens during a DMSA scan?

This procedure may vary depending on where you are having your scan.

First your child will be given an injection of a special substance called a radiotracer into a vein. This injection gives off a small amount of radiation that can be detected by our specialised cameras. The DMSA radiotracer shows functioning kidney tissue. We only inject a small amount of this radiotracer, the dose we give is based on your child's weight.

Then we need to wait around three hours for the radiotracer to be taken up by the kidneys before we can do the scan. Feel free to leave our department and

return promptly at the time given to you by your Nuclear Medicine Scientist.

When you return to our Nuclear Medicine Department your child will be asked to empty their bladder or have their nappy changed and then we can begin the scan.

In our scanning room your child will lay on our scanning bed and possibly be wrapped in a blanket with Velcro seatbelts to help them keep still as movement can ruin the images and lead to them needing to be repeated.

A series of pictures will be taken of your child's abdomen from different angles over a period of about 30 to 60 minutes.

You will be able to stay with your child throughout the imaging procedure. Your child will be able to watch TV shows, a movie or listen to music whilst the images are taken.

Will my child feel anything during a Nuclear Medicine DMSA scan?

Your child may experience some discomfort with the insertion of the small intravenous injection. This can be minimised with the application of a numbing cream 30 minutes prior to the scan. A child life therapist may be able to help distract your child while they have their injection. Please let us know if you would like us to organize this for you.

During the scans your child will not feel anything. The camera does come quite close but will not touch your child.

Is a Nuclear Medicine DMSA scan safe?

During this procedure, your child will be exposed to a small amount of radiation. The benefits of finding an injury or disease are generally much greater than the potential risk from receiving a small dose of radiation. Allergic reactions are very rare and almost always mild. Your treating doctor should discuss these with you prior to your treatment.

What Happens after the scan?

Once the images have been taken and checked by one of the Doctors or Nuclear Medicine Scientists, you will be able to leave.

The results take a bit of time for our Doctors to analyse and report.

The findings will be sent to your referring doctor.