



Common cardiac tests and procedures

Information on common cardiac tests and procedures for people with a congenital or childhood heart condition.

Why do I need to do tests and regular check-ups?

Your health care team needs to know what is going on with your heart to be able to treat your condition properly.

Sometimes it can be a bit frustrating going in for tests. Your team will only ask you to do a test because they need more information.

The more they know about your condition, the better they can treat it.



IF YOU HAVE REGULAR CHECK-UPS
FOR YOUR HEART, YOU ARE
3X LESS LIKELY
TO DIE FROM YOUR
HEART CONDITION.¹

Sometimes there are deaths that are preventable. Your healthcare team only asks to see you regularly because they know it's good for you.

What are the most common cardiac tests?

The most common tests are:

- ECGs (electrocardiograms)
- chest x-rays
- blood tests
- ultrasounds
- exercise tests
- CT scans (computerised tomography)
- MRIs (magnetic resonance imaging)
- catheters



Make sure you are seeing a cardiologist that is specifically trained in treating congenital or childhood heart conditions.

ECGs

An ECG checks your heart rate, heart rhythm and the blood flow through your heart and heart valves.

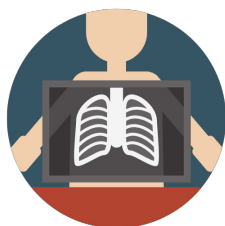


When getting an ECG, sensors are attached to the skin on your chest, arms and legs. The sensors detect the electrical signals your heart produces each time it beats.

Getting an ECG is quick and painless.

Chest X-Rays

Chest x-rays show the size and shape of your heart and lungs.



X-rays are quick and painless. You will be exposed to a small amount of radiation, but not enough to be dangerous to your health.

Blood tests

Blood tests can be used to diagnose and monitor issues with your heart, and monitor the effectiveness of medication and treatments.



Blood tests are quick and simple. They aren't painful, but if you are uncomfortable around needles, you may want to take along some extra support when getting one (like a family member or friend).

Ultrasounds

Ultrasounds are used to look at the structure and function of the heart.



Ultrasounds show the:

- heart valves and how well they are pumping
- size of the four main heart chambers
- blood flow, including how quickly blood is flowing and in which direction

They are painless, quick and easy to get.

Exercise tests

Exercise tests help show how your heart responds to physical activity.



An exercise test can show:

- how much exercise you can do (exercise capacity)
- if there is something causing you to experience symptoms during exercise

Exercise tests are usually done on a treadmill or stationary bike.

They start off very slowly. Each minute, the intensity increases slightly. Your team will use an ECG to monitor your heart during the test.

Doing an exercise test might sound a bit intimidating at first, but no one is expecting you to run a marathon. You just need to do the best you can on the day. You can stop as soon as you need to.

CT scans

A CT scan provides a 3D image of the heart.



When getting a CT scan, you will lie down on a table and slide in and out of a long tube-like machine (it looks a bit like a donut!).

It usually takes about 5 minutes.

Sometimes your team will put a drip in the back of your hand to insert contrast dye into your body. The contrast allows them to see your heart more clearly during the scan.

As the dye causes your blood vessels to enlarge, it can make you feel hot all over and like you've weed your pants (you won't actually!). This only lasts for ten seconds.

Getting a CT scan is painless. However, if you are claustrophobic, you may want to take some extra support with you.

A CT scan has a small amount of radiation but your team will manage your exposure so that it isn't harmful to your health.

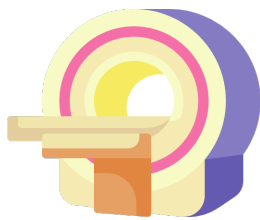
MRI scans

An MRI is like a super-powered version of a CT scan. It generates an extra high-resolution image of the inside of the heart. It is often used to find out if there is any scarring or inflammation in the heart.

Getting an MRI is similar to getting a CT scan. You lie on a table and slide in and out of another tube-like machine.

It is completely safe and painless. It can be a little bit noisy while you are in there.

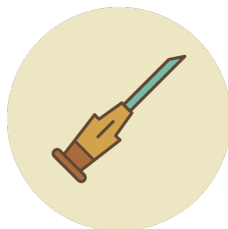
You can't have an MRI if you have metal in your body because the machine is a big magnet. Similarly, you can't take your credit card or Apple watch in there with you.



Catheters

There are two types of catheters:

- diagnostic catheter (used to make a diagnosis by measuring the blood flow and blood pressures in different parts of the heart, and take photos)
- therapeutic catheter (used to perform a procedure)



A catheter is a skinny tube.

Your cardiologist inserts the catheter into one of your main blood vessels (usually in the groin) and threads it up to your heart.

It is done gently, safely and using anaesthetic. You won't be able to feel the catheter during the procedure.

In some cases, therapeutic catheters can be used to close a hole in the heart, fix a cardiac rhythm problem like a palpitation, or do a valve replacement.

If your cardiologist can ever use a catheter for this instead of doing an open-heart surgery, they will.

How often should I get these tests?

This depends on your heart condition and your individual situation.

Your cardiologist and health care team will talk to you about how often you will need to get some of these tests.

If you are unsure, ask them.

References

¹ Cordina R, Nasir Ahmad S, Kotchetkova I, Eveborn G, Pressley L, Ayer J, Chard R, Tanous D, Robinson P, Kilian J, Deanfield JE, Celermajer DS. Management errors in adults with congenital heart disease: prevalence, sources, and consequences. Eur Heart J. 2018 Mar 21;39(12):982-989.

Image from Unsplash

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Where to find more information and support

HeartKids

 heartkids.org.au

Learn more about CHD and the support HeartKids can offer you.

 1800 432 785

Call the HeartKids Helpline for support, advice and guidance.

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