

## Tests for heart problems

If you have problems with your heart, several different tests can help to reveal what is causing them.

### ECG (electrocardiogram)

This is the most simple heart test you can have. It records your heart activity while you are resting. Many people have an ECG for one reason or another, at their GP surgery, in a heart clinic, or at hospital. It is also called a heart tracing.

An ECG is quick and painless – it takes about 20 minutes. A technician or nurse attaches sensors (electrodes) to your chest, arms and legs, to record your heart activity. This is then printed as a graph which a doctor will analyse. If you have this test at the hospital ECG Department a cardiologist (heart specialist) will send a report to your GP within one or two days.



### Exercise stress test

This is also sometimes called an exercise tolerance test. It is like an ECG, but it's done while you are exercising on a treadmill. You can read more information about exercise stress tests from Canterbury DHB.

### Holter monitor

Holter monitor continuously records your heartbeat and rhythm over time (usually 24 hours). It shows how your heart reacts to your normal daily activities, not just while you are resting. It is simple and painless.

You go to the ECG Department, where electrodes are placed on your chest, to send your heart signals to a small, portable recorder. You will wear this for the next 24 hours. You will also get a diary to record what you do and any symptoms you have.

The next day you will return the recorder and the diary, which a doctor will analyse.

You cannot have a bath or shower while you are wearing a Holter monitor.

### 24-hour blood pressure monitor

Everyone's blood pressure changes during the day, but some people's changes more than others'. Sometimes it can be useful to see how your blood pressure changes.

This is a 24-hour test. At the ECG Department a monitor is put on your arm, to record your blood pressure. This includes a cuff that inflates every 15 minutes during the day and every 30 minutes while you are sleeping, so you need to wear loose sleeves. You will also get a diary, to record what you do and any symptoms you have.

The next day you will return the monitor and the diary, which a doctor will analyse.

You cannot have a bath or shower while you are wearing the blood pressure monitor.

### Echo tests (echocardiograms)

Echo tests use ultrasound waves to give a live picture of your heart (similar to how ultrasound waves show images of a baby inside its mother's womb). An ultrasound probe is held against your chest, to show the shape of your heart, how it is beating, and how its valves are working. You can read more information about echo tests from Canterbury DHB.

A dobutamine stress echo test is like an echo test but uses a drug to make your heart beat more forcefully, as it does when you exercise.

A transoesophageal echo (TOE) is an echo test in which the probe is put down your oesophagus (gullet) to view your heart from a different angle. You will be sedated if you have this test.

### Electrophysiology study

This is a test that looks at the electrical circuits in your heart.

### Angiogram

An angiogram looks at the blood vessels in your heart, to check for any blockages or narrowed arteries that could cause angina or a heart attack.

**i** Local health professionals recommend the following pages.

- Heart Foundation – Tests to diagnose heart disease ([www.heartfoundation.org.nz/know-the-facts/tests](http://www.heartfoundation.org.nz/know-the-facts/tests))  
This page briefly describes a number of different tests to diagnose heart disease. For more detailed information, see the links below.

*Compiled by HealthInfo clinical advisers. Endorsed by clinical director, Cardiology, Canterbury DHB. Updated May 2016.*