Stress Echocardiogram

What is a Stress Echocardiogram?

This diagnostic test includes an echocardiogram (echo) or ultrasound of the heart before and after an exercise test. The echocardiogram gives information about your heart's function. Exercise testing measures the performance and capacity of the heart, lung and blood vessels. In most cases, the test is carried out to assist in diagnosis of coronary artery disease.

How is it done?

A treadmill is used test your response to exercise. The heart motion is assessed with echocardiography. Your heart rate, blood pressure and electrocardiogram (ECG) will also be monitored. The exercise test is performed by a Doctor and a cardiac technologist.
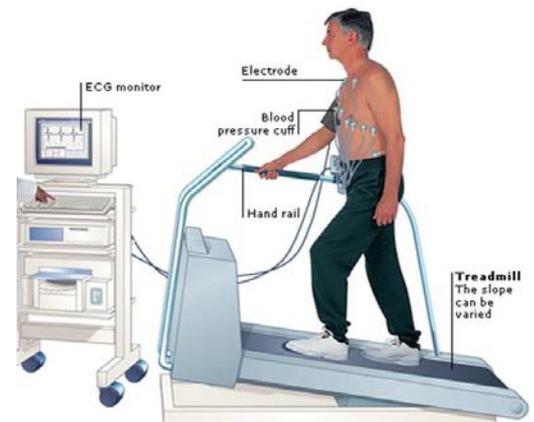
What do I do on the day?

Please present yourself at the Reception desk at the Heart Centre, 3rd Floor, Phillip Block. Please bring your Medicare Card and the Referral from your doctor (if not already faxed)

Can I eat and drink before my test?

Consume only light meals on the day of the appointment. Do not eat 1 hour before the test.

### Do I take my medications on the day of the test?

Yes. You should take all normal medications unless instructed otherwise by your doctor.

What do I wear for the test?

Comfortable walking shoes, shorts, tracksuit or loose comfortable trousers.

What happens during the test?

Sticky electrodes will be placed on your chest and back to monitor your heart rate and

rhythm. Your blood pressure will also be recorded. Before the test begins, you will be examined by the Doctor and a resting ECG and echocardiogram will be done.
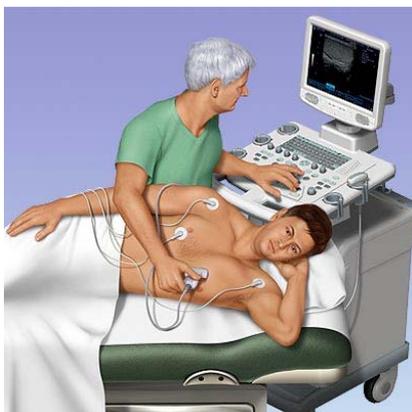
Testing consists of walking on a treadmill. The speed and slope will be increased every 3 minutes. You will be required to walk for about 15 minutes. The test is stopped if you reach your target heart rate or earlier if you develop chest pain, fatigue, breathlessness, other limiting symptoms, or if changes on the ECG or echo concern the Doctor.

It is important to tell the Doctor if you are feeling unwell in any way or if you want to stop.

For the echo you will be asked to lie on a bed and a transducer (probe) will be placed directly on the skin on your chest. The transducer sends out soundwaves (ultrasound) that identify different structures of your heart. A water-based gel is applied to the skin on your chest to improve the image quality.

The ultrasound is harmless but at times firm pressure on the chest with the ultrasound probe may be required. During the echo, it is important that you lie quietly and are as relaxed as possible, as this aids the technologist and will reduce the test time. The echo is done immediately before and after exercise.

How long does the test take?

Approximately 1 and half hours.

What are the risks?

The ultrasound is completely harmless. The exercise stress testing however does carry some risk. Exercise tests are usually performed on patients with known or suspected heart disease. While every effort is made to minimise the risks of the procedure, there is a small but definite risk of complications. Emergency equipment and trained personnel are available to deal with any situation.

Major potential complications include
- Disturbance of heart rhythm   2 or 3 in 10,000 tests.
- Prolonged angina (heart pain), or heart attack 2 or 3 in 10,000 tests.
- Death   1 in 10,000 tests.

The risk of complications and death may be higher in patients who have severe heart disease.

The Doctor performing the test will take this into account before commencing the study. Please feel free to discuss these issues prior to agreeing to undergo the exercise test.

How will I get my results?

At the end of the exercise test the Doctor will discuss the results with you and explain what the results mean- If the test is positive (ie. indicating coronary artery disease), the follow up plan will be reviewed. A copy of your results will be posted to your referring Doctor and you will be advised to make an appointment with this Doctor in the following 1-2 weeks. Alternatively, an appointment at the Heart Centre Cardiology Clinic can be made for you.