What are the risks?

A stress echocardiogram is a widely used and generally very safe test. While most patients experience no significant problems, there are some brief and rare risks to be aware of.

Common and minor side effects

These effects are temporary and usually disappear within minutes of finishing the test.

You may feel:

- Your heart racing or beating more forcefully.
- Temporary flushing, warmth, dizziness, or nausea.
- It is normal to feel breathless, similar to how you feel after a brisk walk.

Serious complications are very uncommon, occurring in fewer than 1 in 1,000 cases.

- Abnormal irregular heart rhythms: These usually settle on their own, but very occasionally require medical treatment.
- There is a very rare risk of an allergic reaction.

Please let the nurse or doctor know if you feel uncomfortable. You will be carefully monitored throughout the test to make sure that you are as safe as possible.

What should I expect and how should I prepare?

The team will want you to feel happy and ready for your test. On the day, the team will explain what is happening, but they often don't have much time for a long chat.

If you have questions, please talk to the specialist who sent you for the test before you arrive. This ensures you have all the answers you need and feel comfortable with the plan before you start.

If you are asked to do so, please remember to confirm that you plan to attend your appointment.

Your appointment letter may advise you to stop certain tablets before the test.

Please wear comfortable clothing and comfortable shoes if you're doing an exercise stress echo.

If you have a GTN spray or asthma inhalers, please bring these with you.

The time from entering the room to leaving the room is about an hour, but you usually exercise for up to 10 minutes. This depends on how well you can exercise and how your heart responds on the day.

If you are late it may not be possible to perform the test so please make every effort to arrive on time.

After the Test

Usually the team will not be able to give your results on the same day. A heart doctor will look at your test after you go home. They will send a report to the specialist who asked for your test. That specialist will then get in touch to explain your results and talk about any next steps or treatments.

Any questions or comments?

If you have other questions that we haven't covered then please ask the healthcare team looking after you. Unfortunately, NW Hearts Charity can't answer questions about your own health situation.

If you have any comments about this leaflet (good or bad), then please contact **office@nwhearts.org**
NW Hearts Charity always welcomes feedback about how we are doing and how we might improve.

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Disclaimer: NW Hearts Charity hopes that anyone reading this information finds it helpful. However, this is general information and does not replace medical advice, diagnosis or treatment. Please speak to your healthcare professional if you have any questions about your health. So far as is permitted by law, NW Hearts Charity does not accept liability in relation to the use of any information published by us.

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Stress Echocardiogram (Stress Echo)

Patient information leaflet

NW Hearts Charity
Your heart · Your charity

What is a Stress Echocardiogram (Stress Echo)?

An echocardiogram uses an ultrasound probe on your chest to take pictures of your heart. During a stress echocardiogram, the team safely raises your heart rate while taking these pictures to see how your heart works when it is working harder.

The aim of the test is to assess how your heart functions when it's beating faster, not only at rest. The word 'stress' in the name does not mean that your heart will be put under unnecessary strain or that you will experience emotional stress.

Why do I need a stress echocardiogram?

Stress echocardiograms are used to provide doctors with more detailed information about how your heart is working.

For example:

- If you have chest discomfort - to see if a heart artery narrowing could be the cause of your symptoms
- To assess a heart valve problem. Heart valves are flaps of tissue in the heart - which open and closes like one-way doors. When they work normally, they ensure blood flows in the right direction
- To see if you have a thickened or weakened heart muscle (which doctors call cardiomyopathy)

How is a stress echocardiogram performed?

Your healthcare team will increase your heart rate by asking you to exercise on a bike or treadmill or by using a medication whilst you are resting.

Your ability to move and walk, along with your specific heart condition, will determine whether an exercise test or a dobutamine stress test is right for you.

Your healthcare team will attach several sticky pads to the outside of your chest so they can measure your heart rate. They will also use a blood pressure cuff on your arm to monitor your blood pressure.

In many cases, the team may insert a small tube called a cannula into a vein in your arm. A special dye (called contrast) can be injected into the vein which can allow the team to examine the heart more clearly. They may also give you medication to increase your heart rate through the cannula.

There are two parts of the test:

1. The team will first take pictures of your heart when you are at rest and your heart is at a lower level

2. Repeat pictures will be taken when your heart rate is increased, either using exercise or with medication.



Exercise bike



Treadmill

Exercise stress echocardiogram

The clinical team will perform an echo at the beginning when you are resting. You will then either pedal on a fixed exercise bike or or walk on a treadmill. It is not a fitness test. Once you have exercised enough, further pictures will be taken of your heart. The doctor will compare the pictures taken at the beginning with those taken after exercise.

Dobutamine stress echocardiogram

Dobutamine is a short-acting medication that your healthcare team can give into a cannula (tube) inserted into the vein in your arm. This increases your heart rate and makes your heart pump harder and faster, to mimic exercise.

You will lie on a couch. The clinical team will perform an echo at the beginning before giving you dobutamine.

The team will then give you dobutamine. The dose will be slowly increased until your heart rate reaches the right level. Sometimes additional medication (called atropine) is also given to help your heart rate increase. The team will monitor your blood pressure and heart rate throughout the test. When your heart rate has reached the right level, the team will take repeat pictures of your heart. The doctor will compare the pictures taken at the beginning with those taken after dobutamine. The medication will be stopped and the team will monitor you until your heart rate returns to normal.



Dobutamine stress echo room