

Transthoracic Echocardiogram (2D Echo Doppler)

Frequently Asked Questions

What is a transthoracic echocardiogram?

A transthoracic echo is a test that takes a picture of the heart with the use of a transducer (probe) placed on the chest wall. Like all other echocardiograms, ultrasound technology is used. High frequency sound waves inaudible to the human ear are sent from the probe and directed toward the heart. As the sound goes through the different structures, part of it bounces (echoes) back to the probe and is interpreted by the ultrasound machine into images of, and blood flow within, the beating heart. The images are then displayed on the monitor and recorded on disk for future review. At UHN, the test is performed by a sonographer trained in cardiac ultrasound and is interpreted by a cardiologist.

The test is useful for assessing the size of the heart chambers and walls, heart muscle function, heart valve function, blood clots or masses in the heart, fluid around the heart, presence of holes or defects between the heart chambers, and abnormalities of blood flow within the heart.

The test can take from 30 to 60 minutes depending on what information the physician has requested.

What preparation is necessary for a transthoracic Echo?

There is no special preparation required if you are having a transthoracic echo. Bring your UHN hospital card and a valid health card when you come for your test.

What happens on the day of the test?

Before the test:

- A receptionist will ask for your UHN hospital card and health card when you arrive. If you do not have a hospital card, you will be asked to pick one up at Patient Registration.
- A sonographer will escort you to the change room or to the procedure room where you will be asked to remove all clothing from the waist up. A patient gown will be provided. Please take your valuables with you into the procedure room.

During the test:

- You will be asked to lie flat on your back as wires are placed on your chest to monitor your heart rhythm.
- The sonographer will instruct you to turn on your left side and the probe will be placed on your chest. A lubricant (gel) is used to improve picture quality and this may feel cold. Gentle pressure is applied onto your chest as necessary in order to obtain the information but generally should not be painful. Let the sonographer know if he or she is pressing too hard.

- You will see images of your heart on the monitor, some of which will have color. The color and the sounds that you may hear coming from the machine are representations of blood flow within your heart.

After the test:

- The staff echo cardiologist will read the study.
- The report will be sent to the doctor who requested the test and he/she will discuss the results with you at a later time.

If you require further information contact:

Toronto General Hospital Echolab
416-340-4026

Toronto Western Hospital Echolab
416-603-5544