

Echocardiogram and Stress Echo

What is an echocardiogram?

An **echocardiogram** [ek-oh-KAHR-dee-uh-gram] is a test that uses high-frequency sound waves (ultrasound) to check your heart. The sound waves bounce (or “echo”) off structures in your heart, and the echoes are shown as images on a monitor.

A **stress echo** compares the activity of your heart when it is at rest to when it is working hard.

Why do I need these tests?

A standard echocardiogram shows detailed information about your heart, including the:

- Size and structure of the heart chambers, and problems such as an opening in a chamber wall
- Amount of blood the heart can pump
- Structure and movement of heart valves, or the condition of an implanted artificial valve
- Condition of blood vessels
- Presence of blood clots or tumors in the heart

A stress echo will show your doctor if there are blockages in the arteries of your heart.

What are the possible risks and benefits?

The table below lists the most common possible benefits, risks, and alternatives for an echocardiogram or stress echo. Other benefits and risks may apply in your unique medical situation. Talking with your doctor is the best way to learn about these risks and benefits. Be sure to ask any questions you have.

Possible benefits	Possible risks and complications	Alternatives
An echocardiogram helps your doctor see the structures and measure the function of your heart.	<p>There are generally no risks for a standard echocardiogram. Risks of a stress echo include:</p> <ul style="list-style-type: none"> • Symptoms caused by stress on your heart, such as chest pain, high blood pressure, irregular heartbeats, dizziness, nausea, or heart attack. You will be carefully monitored during the test to prevent these symptoms or to react quickly if they occur. • Allergic reaction to the medicine that increases your heart rate (given if you can’t exercise). This complication is extremely rare. 	<p>Other heart tests include:</p> <ul style="list-style-type: none"> • EKG or Holter monitor testing • CT scan, MRI, or nuclear test



What do I need to do now?

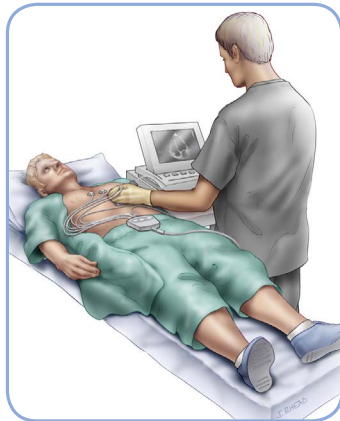
Before a standard echocardiogram, there are no preparation steps. Before a stress echo:

- 1 Follow all instructions on when to stop eating and drinking.** You may be asked to avoid caffeine or tobacco for several hours before the test.
- 2 Tell your doctor about all the medicines you are taking,** including all prescriptions, over-the-counter medicines, inhalers, patches, vitamins and herbal remedies.
- 3 Tell your doctor if you have allergies** to any medicines.

What can I expect during a standard echo?

A standard echocardiogram usually takes 30 to 45 minutes. Here's what you can expect:

- **You will need to take off any clothing above the waist**, and put on a gown. Twelve electrodes will be attached to your chest to monitor your heart rate and rhythm. A cuff may be placed on your arm and a clip may be attached to your finger to check your blood pressure and the oxygen in your blood.
- **You will lie on your left side on the table.** The table might have a small section that drops down under your left side to give the technician better access to your chest.
- **A small amount of gel will be placed on your chest.** A technician will move a device called a **transducer** across your chest, side, and back. As the transducer sends out sound waves, the technician will capture and save images of your heart structures. The technician may ask you to breathe deeply, cough, or briefly hold your breath.



When should I call my doctor?

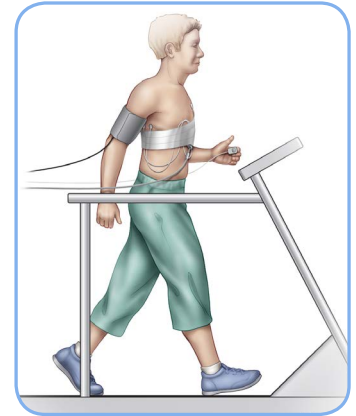
Contact your doctor if you experience any heart symptoms after the test, such as:

- A racing or fluttering heartbeat
- Chest pain
- Shortness of breath

What can I expect during a stress echo?

A stress echo usually takes 45 to 60 minutes. Here's what you can expect:

- **You will have a standard echocardiogram**, described at left.
- **You will walk on a treadmill if you are able.** The treadmill starts slowly and becomes faster and steeper every few minutes until you reach a target heart rate. Healthcare providers will monitor your blood pressure, pulse, and other signs as you exercise. **If you have any symptoms or don't feel well, tell the technician right away.** The treadmill can be stopped at any time. Wait for it to stop before you step off.
- **If you can't exercise, you will receive medicine** through your vein (intravenously, or IV) to increase your heart rate. Tell your healthcare providers if you have any symptoms such as chest pain, a fluttering heartbeat, trouble breathing, or sweating.
- **You will have a second echocardiogram** to take images of your heart while it is beating quickly.



What happens after?

- The electrodes will be taken off. If you received medicine to increase your heart rate, the IV line will be removed.
- You can generally go home right away, and there is no special self-care needed at home.

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