

Stress Echocardiography:

A stress echocardiogram combines a stress test with ultrasonic imaging of the heart to determine heart structure and function and to detect low blood flow states to the heart muscle due to obstructed coronary arteries. The echocardiogram portion of the test creates images of the heart using an ultrasound transducer placed on your chest wall. The ultrasound can see through the skin and chest wall all the way to your heart and create live motion pictures of cardiac structure and function. You will not feel the ultrasound, but you will feel a slight pressure of the transducer on your chest and you will be able to see the live motion images of your heart beating. Ultrasound images of the heart will be taken before and after a cardiac stress test to determine if there might be significant coronary artery obstructions resulting in inadequate blood flow to the heart muscle. We reserve 90 minutes for these examinations, but the actual imaging and stress portions of the exam examination take about 45 to 60 minutes to complete. Detailed instructions about the examination are as follows:

- Unless your doctor tells you otherwise, continue to take your medications normally. Patients taking beta blockers may be asked to taper and/or stop that medication 24 to 48 hours prior to the stress echo. You will be given specific instructions about this by your doctor.
- As with any form of exercise, it is wise not to eat within 4 hours of the stress test, although this is not a requirement.
- If you are scheduled for an *exercise stress test*, the stress portion of the exam requires you to walk at an incline on a treadmill. Please wear comfortable “walking shoes” and slacks.
- If you are scheduled for a *dobutamine stress test*, the stress portion of the exam is performed by infusing a medication into an intravenous (IV) line that will be placed in your arm. The medication is painless and accelerates your heart rate much like adrenaline. Like caffeine in coffee, the medication might make you feel a bit jittery, but the effect subsides in 15 minutes.
- Once in the exam room, cell phones, pagers, and other electronic devices should be turned off or set to the "vibrate only" mode.
- One other family member may stay with you during the initial resting echocardiogram, but they will be asked to return to the waiting room for the stress portion of the exam. Your family member may come back to the exam room after the stress test so that they may also hear any post-stress instructions.
- Our nurse will take your medical history, so please bring a list of all your medications.
- Please tell our nurse if you have an allergy to latex.
- In order to perform the exam, clothing must be removed from the upper body. Females will be covered by a gown to maintain privacy. Sheets, blankets, and pillows are available for your comfort.
- You may wear glasses, dentures, and hearing aids.
- Pacemakers and/or defibrillators will not interfere with the exam, but we would like to know if you have one of these devices before starting the test. Occasionally, the pacemaker function of your device will be used to help with the stress portion of the test.
- There is no radiation involved with the exam; only sound waves which are harmless to you and technologist.
- Please avoid jewelry that hangs down to the chest and/or lotions, oils, or powders that may inhibit the adhesive of EKG electrodes.
- Please tell the sonographer if you have an allergy to latex products or rubber gloves.
- You will be asked to lie still on your left side and back. Please tell the sonographer if your ability to lie is limited.

- Exam time ranges between 45 to 90 minutes, depending upon the clarity and complexity of your imaging.
- During the exam, the sonographer will apply an odorless, water soluble, hypoallergenic gel onto your chest and move a transducer probe around different locations of the chest wall. Mild pressure will be applied to the transducer. If this pressure is uncomfortable, please let the sonographer know.
- An echo imaging agent may be used to optimize the cardiac images. These agents are given intravenously by one of the echo lab nurses and their use does not indicate that your exam is abnormal.
- Training physicians, students, or other imaging staff may observe or participate in your exam.
- The sonographer is not legally able to answer questions about the results of your exam.
- A physician with special training in echocardiography will review your images in detail and issue a final report to the physician ordering the exam in less than 24 hours.
- Once the test is complete, you may resume normal activities without restriction.
- Your images and reports are stored for future review and comparison. Your records are confidential and accessible only by your healthcare providers.
- Stored images and reports may be used for education, research or quality control purposes. All healthcare information used for these purposes are stripped of personal information.