Transthoracic Echocardiography:

What Is It?
An echocardiogram, or "echo", is a painless test that uses ultrasound to evaluate the structure and function of the heart. Sound waves are emitted from a small probe that is placed over the chest. The sound waves that are produced are of such a high frequency that they are inaudible to humans. These sound waves bounce off your heart and are beamed back into the echo machine where they are recorded like sonar.

What Will Happen During the Test?
During the study, you will be asked to lie quietly on your left side. A trained, certified, and experienced cardiac sonographer will move the probe to various areas on your chest recording moving images of the heart. This test takes approximately 30 to 45 minutes to complete. There is no preparation required for the test. To see a sample of the type of moving image the sonographer records, click the image to the right. The download time for this moving clip is about 30 seconds. No additional plug-ins are required.

Why Is This Test Done?
An echocardiogram lets the physician see the structure of the heart:

- Size, shape, and thickness of the chambers of the heart
- Pumping strength of the heart muscle with each beat (the ejection fraction)
- Congenital abnormalities of the heart
- Valve function
- Amount of heart muscle damage following a heart attack and other heart muscle diseases
- Presence of extra fluid in the protective sac that surrounds the heart (pericardium)
- Aortic size
- Impact of other diseases on the heart