

Echocardiogram

What is it?

An echocardiogram is an ultrasound movie of the heart and blood vessels. It shows the structure of the heart and surrounding blood vessels, how well the heart is pumping, and how the blood is flowing through the heart and vessels. It can detect nearly every congenital heart defect or any problem of the heart muscle function. Echocardiography is the most common test used in children to diagnose or rule out heart disease and also to follow children who have already been diagnosed with a heart problem. This test can be performed on children of all ages and sizes including fetuses and newborns.

How is it done?

The ultrasound test is done with your child lying down comfortably on a bed or examination table. Infants may be able to lie in their parents lap.

The test is often performed by a specialized technician, called a sonographer, or a physician. The test requires placing a few stickers (like those used for the ECG) on your child's chest. The sonographer will use a special ultrasound device (called a probe) and place a small amount of gel on the end of it. The probe is then placed on the front of your child's chest, upper abdomen and the root of the neck. This does not hurt, but some children are unhappy about the feel of the gel and movement of the probe. Various pictures of the heart are recorded from these viewing points. The sonographer will make many adjustments in the ultrasound machine during the study to get the clearest pictures possible. The sonographer may ask that your child turn on the left or right side or extend the neck backward for portions of the study.

Depending on the child's age and the diagnosis being studied, an echocardiogram will usually take 10–60 minutes to perform. If your infant or young child is particularly anxious or unable to cooperate for the study, your cardiologist may recommend that he or she be sedated for the test.

Does it hurt?

No. No feeling comes from the sound waves themselves; sometimes the skin feels mildly warm. Occasionally there's mild discomfort from the transducer pressing on the skin.

Is it harmful?

No. There are no known ill effects of the sound waves used during a standard echocardiogram.