



## A Guide to Fetal Echocardiography



The Heart Center at Nationwide Children's Hospital has earned an international reputation for innovation and forward-thinking. From the creation of the world's first Hybrid Cardiac Catheterization Suites and the first Hybrid Cardiac Operating Suite in the nation, to the development of a comprehensive adolescent and adult congenital program, The Heart Center team is constantly looking to improve care options. Nationally ranked as one of America's best by *U.S. News and World Report* for Heart and Heart Surgery, you can be assured that you have access to the expertise and resources that can handle any level of care necessary.



*ICAEL Accredited Echocardiography Laboratory  
OptumHealth Center of Excellence for Congenital Heart Disease (CHD), one of 14 centers in the U.S.  
Ranked as one of America's best for Heart and Heart Surgery by U.S. News and World Report*



*Named one of America's top three in cardiology/ cardiothoracic services by Parents magazine*

## What is fetal echocardiography?

Fetal echocardiography is a specialized ultrasound test performed during pregnancy to evaluate the position, size, structure, function and rhythm of the unborn baby's heart. An obstetrician is able to obtain a limited view of the baby's heart during a routine pregnancy ultrasound. A fetal echocardiogram provides a detailed evaluation by a specialist in fetal echocardiography of the baby's heart.



## What is the benefit of fetal echocardiography?

One of the benefits of fetal echocardiography is prenatal diagnosis of congenital heart disease (CHD). This allows the baby to have faster access to medical and surgical intervention after birth. In some cases, prenatal diagnosis has been shown to improve overall outcomes in babies with complex heart disease.

## Who needs a fetal echocardiogram?

Certain women are at a higher risk for delivering a baby with congenital heart disease. These patients should be considered for a fetal echocardiogram referral.

Indications include the following:

- :: Fetal heart abnormalities suspected from a routine obstetric ultrasound
- :: Family history (first degree relative) of CHD
- :: Abnormal fetal heart rate or rhythm
- :: Abnormality of another major organ system
- :: Twin-to-twin transfusion syndrome
- :: Insulin-dependent diabetes mellitus
- :: Sjogren's Syndrome or Lupus (especially in the presence of ssA or ssB antibodies)
- :: Exposure to some drugs in early pregnancy, for example, some anti-epileptic drugs
- :: Hydrops
- :: Increased nuchal translucency on a first trimester screening
- :: Chromosomal abnormalities associated with CHD

### **Are there limitations to fetal echocardiography?**

There are some abnormalities that even a detailed fetal echocardiogram can not detect prenatally. These include pulmonary venous anomalies, coarctation of the aorta, small holes and mild valve abnormalities. Additionally, some cardiac lesions are not evident until after the baby is born. Occasionally, repeat evaluation is necessary.

### **What does my patient need to know to prepare for a fetal echocardiogram?**

The patient will receive directions and appointment confirmation by mail two weeks before the appointment. Mothers who are less than 24 weeks pregnant are asked to arrive with a moderately full bladder. The duration of the fetal echocardiogram is about one hour.

### **A fetal echocardiogram is indicated – what happens next?**

To schedule a fetal echocardiogram, a fax referral form must be filled out and faxed to The Heart Center at Nationwide Children's at (614) 722-5552. A representative from The Heart Center will schedule the test and return the form, with the appointment date and time, back to the obstetrician's office within one business day.

Ideally, the test will be scheduled between 20-24 weeks gestation. If the pregnancy is more than 24 weeks, the test will be scheduled in the next available time slot. If the obstetrician feels that the fetal echocardiogram needs to be performed urgently, please call (614) 722-6657. The patient will be notified of their appointment by the obstetrician's office.

### **When will I receive results?**

After the pediatric cardiac sonographer performs the test, a pediatric cardiologist will meet with the family the same day to review the results. If the baby does have congenital heart disease, the doctor will discuss treatment options and prognosis. A plan will be established for each patient and follow-up testing will be scheduled as needed. The referring physician will be faxed a complete report on the same day as the fetal echocardiogram.

### **What if the baby requires special care?**

If indicated on the fetal echocardiogram that the baby will require services at Nationwide Children's Hospital after birth, the cardiologist will contact the program coordinator of the Fetal Diagnostics Program. The nurse coordinator will work closely with the families from the time of diagnosis by helping prepare and educate for the birth and care of their child. The coordinator helps facilitate communication amongst the health care team and pediatric specialists. The goal is for families to experience a seamless transition from pregnancy to newborn care.



## **THE HEART CENTER AT NATIONWIDE CHILDREN'S HOSPITAL**

<b>Central Scheduling for Cardiology</b>	<b>(614) 722-2555</b>
<b>Emergency Scheduling</b>	<b>(614) 722-6657</b>
<b>Fax referrals</b>	<b>(614) 722-5552</b>

## The Heart Center

---

700 Children's Drive

Columbus, Ohio 43205

(614) 722-3108

[NationwideChildrens.org/HeartCenter](http://NationwideChildrens.org/HeartCenter)

