Perinatal Cardiology Program

Having a fetal echocardiogram can help identify whether a baby will be born with congenital heart disease (CHD). Finding CHD early enables physicians to plan specialized care and provide the best treatment options available. Our perinatal cardiologist will discuss the findings with you and your obstetrician or perinatalogist to ensure optimal care throughout your pregnancy.

To schedule a fetal echocardiogram with one of our pediatric cardiologists, please call Dr. Louis Bezold or Dr. Michelle Grenier at 859-257-5129 or Dr. Carol Cottrill at 859-422-4278.

Visit ukhealthcare.uky.edu/kch for more information.
Who needs a fetal echocardiogram?

Some women are at increased risk for giving birth to a baby with congenital heart disease (CHD) or other cardiac problems. In addition to a routine cardiac screen by their obstetrician, they should be considered for referral for a specialized fetal echocardiogram. Fetal echo is recommended for women who have:

- Family history of CHD. The risk if a previous child has CHD is about 1 in 50; about 1 in 10 to 1 in 20 if the parent has CHD.
- Abnormal cardiac results from an obstetric ultrasound.
- Abnormal fetal heart rhythm.
- Abnormality of another major organ system.
- Diseases such as diabetes or phenylketonuria (PKU) or connective tissue diseases such as lupus.
- Exposure to certain drugs during pregnancy, including drug or alcohol abuse.
- Viral infections such as rubella (German measles) in the first trimester.
- Fetus with confirmed genetic abnormality associated with CHD and or abnormal amniocentesis.

What are the benefits of fetal echocardiography?

Congenital heart disease is the most common severe congenital abnormality in the newborn and the cause of more than half the deaths from congenital anomalies in childhood. Prenatal diagnosis of CHD allows physicians and families the greatest number of therapeutic options while allowing appropriate delivery planning for rapid medical and surgical intervention once the baby is born.

Who should perform a fetal echocardiogram and when?

A limited cardiac evaluation is possible during regular obstetric scanning and is appropriate for women at lower risk. However, some women should have a detailed fetal echocardiogram.

Our fetal cardiology program includes pediatric cardiologists who specialize in fetal echocardiography; as well as the only cardiac sonographers in the state who have passed the fetal echocardiography registry examinations.

Who will counsel me after the fetal echocardiogram?

Our pediatric cardiologist will sit down with you immediately after the exam and advise you on the findings of the fetal echo. If heart abnormalities are found, the cardiologist will explain the natural history of the defect as well as assist in planning and preparation for the remainder of the pre- and postnatal care your baby will require. The cardiologist will then discuss the findings with your obstetrician or perinatologist to ensure optimal care throughout your pregnancy.

Our fetal coordinator will also work with you to set up appropriate visits with a cardiac surgeon or geneticist as needed, as well as tours of the hospital and meetings with staff who will care for you and your child. This coordinator, a nurse specializing in pediatric and fetal cardiology as well as pediatric cardiothoracic surgery will be available to help answer any questions and help guide you throughout the pregnancy.

Are there limitations of fetal echocardiography?

Some heart abnormalities are not detectable prenatally even with a detailed expert examination. These tend to be minor defects, such as small holes or mild valve abnormalities. In addition, some cardiac defects do not become evident until after birth.

The fetal echocardiogram focuses on the heart so the fetal echocardiographer may not see defects in other parts of the baby.