Locations
The Fetal Heart Program has four locations throughout Northeast Ohio. We have fetal echocardiogram availability Monday through Friday at the following locations.

UH RAINBOW BABIES & CHILDREN’S HOSPITAL (MONDAY – FRIDAY)
2101 Adelbert Road, 6th Floor
Cleveland, Ohio 44106

UH LANDERBROOK HEALTH CENTER (THURSDAY)
5850 Landerbrook Drive, Suite 240
Mayfield Heights, Ohio 44124

UH MEDINA HEALTH CENTER (FRIDAY)
4001 Carrick Drive, Suite 220
Medina, Ohio 44256

UH WESTLAKE HEALTH CENTER (WEDNESDAY)
960 Clague Road, Suite 1600
Westlake, Ohio 44145

For appointments, call 216-844-3528

Reference:
Indications for Fetal Echocardiography

The indication for fetal echocardiography encompasses all fetal cases with a known or suspected cardiac abnormality, or cases in which the fetal heart is to be evaluated. This includes cases in which the abnormality is discovered during the course of an examination for another reason, or in which the abnormality is discovered in utero during the course of an abnormality discovered in utero.

Timing of Fetal Echocardiogram

The timing of fetal echocardiogram in gestation in which a fetal echocardiogram is performed is dependent on a variety of factors. Most frequently it is obtained between 18 and 22 weeks gestation.

Early Fetal Echocardiogram

An advanced early fetal echocardiogram can be conducted by the specially trained Congenital Heart Collaborative cardiologists at 14 – 16 weeks gestation utilizing the latest equipment for some patients who present with the following indications:

• First-degree relative with CHD
• Abnormal finding on an ultrasound
• Abnormal genetic screening

Indications for an early fetal echocardiogram are:

• Abnormal nuchal translucency (greater than or equal to 3 mm, or greater than or equal to 50th percentile)
• Abnormal ductus venous flow
• Presence of tricuspid regurgitation
• Abnormal cardiac axis (normal 40 – 60 degrees)
• Presence of pericardial/plural effusion
• Abnormal finding on an ultrasound
• Abnormal genetic screening

Fetal Cardiac Intervention

Fetal cardiac intervention is performed by team members from The Congenital Heart Collaborative from UH Rainbow Babies & Children's Hospital, Nationwide Children's Hospital and University Hospitals MacDonald Women's Hospital. We have a dedicated team of fetal cardiac interventionists, maternal-fetal medicine specialists, interventional cardiologists and anesthesiologists who intervene on fetal hearts to alter the progression of the heart disease in utero. Our team can intervene on cardiac defects such as aortic stenosis (AS) with evolving hypoplastic left heart syndrome (HLHS), HLHS with intact or highly restrictive atrial septum, and pulmonary atresia with intact ventricular septum. If you identify a candidate for fetal cardiac intervention, call 1-866-929-2099 to connect with the fetal cardiac intervention team.

Fetal Arrhythmia Team

Fetal arrhythmias are fairly common in pregnancy, occurring in 1 – 3 percent of all pregnancies. Fetal tachycardia and bradycardia can lead to nonimmune hydrops fetalis. The Fetal Heart Program at UH Rainbow Babies & Children's Hospital provides a multidisciplinary team approach to diagnosing, treating and monitoring the fetus with an arrhythmia. The team consists of fetal pediatric cardiologists, pediatric electrophysiologists, maternal-fetal medicine specialists, adult electrophysiologists and a dedicated Fetal Heart Program nurse practitioner. Special care paths have been designed to safely administer anti-arrhythmic medications to the fetus and provide guidance for safety monitoring of the maternal-fetal pair.

Fetal Heart Program Team

The Fetal Heart Program includes a dedicated team of specially trained fetal cardiologists, fetal sonographers and nurse practitioners, all of whom are committed to providing the care, education and resources needed to facilitate the best outcome for babies with heart disease and their families. We also work closely with maternal-fetal medicine specialists, genetic counselors and social workers.

Fetal Echocardiogram Volume Trends

Table 1.

Fetal echocardiogram volume at UH Rainbow Babies & Children's Hospital over the past six years.
Congenital heart defects (CHDs) are structural defects within the heart that occur during gestation. Some defects can affect the way the heart functions as well as how blood is delivered to the heart disease. Utilizing a multidisciplinary approach, our highly coordinated team of experts provides a comprehensive, knowledge-based learning experience for the expectant family and fetus with heart disease. Our team consists of fetal pediatric cardiologists, pediatric electrophysiologists, maternal-fetal medicine specialists, adult electrophysiologists and a dedicated Fetal Heart Program nurse practitioner. Special care paths have been designed to safely administer anti-arrhythmic medications to the fetus and provide guidance for safety monitoring of the maternal-fetal pair.

### Indications for Fetal Echocardiography

- First-degree relative with CHD
- Mendelian syndromes that include CHD
- Neonatal syndrome
- Tuberous sclerosis
- DiGeorge syndrome
- Chromosomal syndromes associated with CHD including but not limited to trisomy 21, 13 and 18 and Turner syndrome

### Early Fetal Echocardiogram

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### Table 1.

**Fetal Echocardiogram Volume Trends**

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Fetal Echocardiograms</th>
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<tr>
<td>2010</td>
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<tr>
<td>2015</td>
<td>737</td>
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<tr>
<td>2016</td>
<td>911</td>
</tr>
</tbody>
</table>

**Number of Fetal Echocardiograms**

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