

Newborn Screening for CCHD

Foothills Midwifery offers screening to your newborn for Critical Congenital Heart Defects (CCHD). This test is performed 24-48 hours postpartum at the same visit that the Newborn Metabolic Screening (heel poke test) is performed. In 2015, this test became part of Washington midwives' mandatory testing options due to its low risk, low intervention, and high detection rate for life saving capabilities.

What is a Critical Congenital Heart Defect?

About 18 per 10,000 babies are born every year with a Critical Heart Defect. –American Academy of Pediatrics

About 1 in every 4 babies born with a heart defect has a critical congenital heart defect. Babies with a critical CHD need surgery or other procedures in the first year of life. –Center for Disease Control

Although some babies who are born with a critical heart defect appear healthy at first, over time, due to poor oxygenation from a poorly functioning heart, a critical heart defect can quickly become an emergency.

How is the test performed?

A pulse oximetry machine designed for use on newborns is used to perform the screening. The pulse oximeter measures oxygen in the newborn's hand or wrist and in the newborn's foot. This tells us whether the newborn's heart is able to send an appropriate amount of oxygen rich blood to those extremities.

The pulse oximeter uses infrared light to measure oxygen saturation. It is a completely painless test and infrared light carries no known risks. The newborn is expected to have 95-100% oxygen saturation in both extremities and not to vary by more than 3% between the hand and foot.

Because of the way that fetal circulation has to change to newborn circulation, this test isn't accurate until 24+ hours post birth.

Are there other ways to tell if my baby has a CCHD?

Many of the physical symptoms of CHDs are normal newborn symptoms so are not an accurate in identifying babies who are at risk for a CHD and therefore it is recommended that all newborns have this test performed. Some of the other possible symptoms will be checked during the CCHD screening and are: Difficulty breathing, pounding heart, weak pulse, very pale or blue centrally (not the hands or feet), poor feeding, or lethargy.

What if my baby doesn't pass?

If a baby is found to have a non-passing result, it does not always mean that the newborn has a heart defect but it does mean that more testing is needed. If Foothills Midwifery recommends further testing, this will need to be done with a specialist right away to rule out the possibility of a heart defect.

This screening also does not identify all heart defects, it aims to identify most of the critical heart defects. Your midwifery and pediatric providers may notice other symptoms that need follow-up despite having a passing result.

- Coarctation of aorta
- Double-outlet right ventricle
- d-Transposition of the greater arteries
- Ebstein anomaly
- Hypoplastic left heart syndrome
- Interrupted aortic arch
- Pulmonary atresia (with intact septum)
- Single ventricle
- Total anomalous pulmonary venous return
- Tetralogy of Fallot
- Tricuspid atresia
- Truncus arteriosus