

SCREENING FOR Critical Congenital Heart Disease

What is CCHD?

There are many types of heart defects. Some are called “critical congenital heart disease” or CCHD. CCHD happens when a baby’s heart or major blood vessels do not form properly. A “critical” heart defect is one that needs urgent treatment in order to have the best outcome for the baby. Treatment can include medical and surgical procedures.

Why screen for CCHD?

Most babies are born with healthy hearts and have enough oxygen in their blood. A few are born with CCHD. Although babies are checked very carefully by a doctor after they are born, some babies with CCHD may not have symptoms until later. This screening is now considered a routine part of newborn care in Arkansas hospitals.

How do you screen for CCHD?

We use pulse oximetry (ox·im·e·try) to screen babies for CCHD. Pulse oximetry is fast, easy, and painless.

We will place a small sensor on your baby’s right hand and one foot to measure the oxygen level in the blood. The sensor is made of soft, flexible material. We will usually do this when the baby is at least one day (24 hours) old, but before your baby goes home. If your baby is crying, moving or cold, screening might take a little longer to measure.

What happens if pulse oximetry reading is low?

Your baby’s doctor or nurse will talk to you about low pulse oximetry readings. There are many reasons a baby could have a low pulse oximetry reading. For instance, healthy babies can have a low oxygen level at times. Breathing problems or infections may also cause a low blood oxygen level. However, some babies with low oxygen levels in their blood may have CCHD. If your baby’s oxygen is lower than normal, the test will be repeated one or two times.

If your baby’s oxygen level is below a certain level, or if it is still lower than what it should be after 3 readings, the doctor will check the baby. The doctor may also order an ultrasound of the heart (also called “echocardiogram” or “heart ECHO”) to look for CCHD. The heart ECHO may need to be done in a different hospital or doctor’s office so that it can be read by a children’s heart doctor (pediatric cardiologist). If the heart ECHO is not normal, your baby’s medical team will talk with you about the next steps.

What else do I need to know?

Most babies who pass the pulse oximetry screen will not have a CCHD. **However, it is important for you to know that newborn screening may not identify every child with a critical heart problem.**

Warning signs that all parents should watch for are:

- Bluish color to the lips or skin
- Grunting
- Fast breathing
- Poor feeding
- Poor weight gain

If you notice any of these signs in your baby, please contact your baby’s health care provider right away.



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