



## CRITICAL CONGENITAL HEART DISEASE (CCHD) NEWBORN SCREENING PROGRAM

# FREQUENTLY ASKED QUESTIONS

## EDUCATION FOR PARENTS & GUARDIANS

### What is screening?

Screening means checking whether a person who appears healthy (no signs or symptoms) might have a specific condition to determine if further testing is needed.

### What is critical congenital heart disease (CCHD)?

CCHD is a problem with how the heart is formed or how blood moves through the heart. CCHDs are present at birth and affect approximately 3 out of every 1,000 babies. CCHD can be life threatening and requires treatment during a baby's first year of life. In most cases, the cause of CCHD is unknown.

### What is pulse oximetry?

Pulse oximetry is a simple and painless test that measures oxygen level in the blood. Another name for pulse oximetry is "pulse ox".

### When will the pulse ox test be performed?

The American Academy of Pediatrics (AAP) recommends that all babies be tested for CCHD. Testing should happen 24 hours after birth, before discharge from the hospital.

### Why is pulse ox used to screen for CCHD?

Pulse ox checks oxygen levels in the blood. It can help find some heart defects in babies who do not have any other signs or symptoms. If your baby's oxygen levels are low, the doctor or provider may ask for more testing. One test may be an echocardiogram ("echo"), which is an ultrasound picture of the heart. An "echo" can help diagnose or rule out CCHD.

### How is pulse ox performed?

Using a sticky strip, the pulse ox is placed on the baby's right hand and a foot. A red light sensor measures oxygen level in the blood. The pulse ox test takes place while the baby lays on the bed. It only takes a few minutes. If your baby is uncomfortable it may take longer. You can help by comforting your baby during the testing.

### Can the pulse ox test hurt my baby?

No. The pulse ox test is non-invasive and painless.

Learn more at [vdh.virginia.gov/critical-congenital-heart-disease](https://vdh.virginia.gov/critical-congenital-heart-disease)



Pulse oximeters placed on **right hand** and **foot** to test for CCHD

## ADDITIONAL INFORMATION

# CRITICAL CONGENITAL HEART DISEASE

The American Academy of Pediatrics (AAP) recommends that all newborns be tested for Critical Congenital Heart Disease (CCHD). Testing should occur 24 hours after birth, before discharge from the hospital. Pulse oximetry is a non-invasive and painless test. It measures oxygen saturation in the blood. It can help detect some congenital heart defects in babies who have no other signs or symptoms. Critical congenital heart defects are conditions that are present at birth. The conditions affect approximately 3 out of every 1,000 babies. CCHD can be life threatening and requires treatment during the baby's first year of life. Identifying newborns with CCHD before leaving the hospital can help. It ensures timely treatment and care.

### CCHD Newborn Screening Facts:

- **Screening** means checking whether a person who appears healthy (no signs or symptoms) might have a specific condition to determine if further testing is needed.
- Newborns are screened for CCHD at approximately **24 hours old**
- CCHD screening uses **pulse oximetry**, which measures oxygen level in the blood
- CCHD can lead to **low levels** of oxygen in the blood
- Pulse oximetry testing is **non-invasive, painless and conducted bedside**
- Pulse oximeters are placed on the newborn's **right hand and a foot**
- Pulse oximetry can **help detect CCHD in newborns** who may not show any symptoms
- Newborns who **fail** the CCHD screening will be **retested**. They may be referred for **further evaluation**
- Further evaluation may consist of an **echocardiogram** (ultrasound picture of the heart). The evaluation will help diagnose or rule out CCHD

### References:

1. American Academy of Pediatrics. Newborn Screening for Critical Congenital Heart Defect (CCHD). Retrieved July 22, 2025, from [aap.org/en/patient-care/congenital-heart-defects/newborn-screening-for-critical-congenital-heart-defect-cchd](https://www.aap.org/en/patient-care/congenital-heart-defects/newborn-screening-for-critical-congenital-heart-defect-cchd).
2. CDC. Screening for Critical Congenital Heart Defects. Retrieved July 22, 2025, from [cdc.gov/heart-defects/screening/index.html](https://www.cdc.gov/heart-defects/screening/index.html).
3. Virginia Department of Health. Critical Congenital Heart Disease. Retrieved July 22, 2025, from [vdh.virginia.gov/critical-congenital-heart-disease](https://www.vdh.virginia.gov/critical-congenital-heart-disease).