
INFORMATION FOR PARENTS AND GUARDIANS

Critical Congenital Heart Disease (CCHD)

Pulse Oximetry Screening for CCHD

What is newborn screening?

Newborn screening is a simple way to see if your baby has any serious health conditions that need to be treated right away.

What is critical congenital heart disease?

Critical congenital heart disease is a medical condition. It occurs when a baby's heart or major blood vessels near the heart are not formed properly. The heart may not work well and there may not be enough oxygen in the blood.

Why is it important to screen babies for CCHD?

At first, some babies with a heart defect can appear healthy. If these babies are sent home before being screened, they are at risk for serious illness or death.

How is screening for CCHD done?

Part of the screening is a test called pulse oximetry, which is sometimes called "pulse ox." It can help find dangerous heart conditions early. This test measures the amount of oxygen in the baby's blood and their pulse rate.

Pulse oximetry is fast, easy, and does not hurt. A small, soft sensor is wrapped around the baby's hand and foot. As part of universal newborn screening, every baby born in New York State will have a pulse oximetry screening after 24 hours of life to see if there are signs of CCHD. Waiting 24 hours allows the baby's heart and lungs to fully adjust to life outside its mother.

What happens if the pulse oximetry reading is low?

Some babies will have a low pulse ox (low oxygen level reading). Your health care provider will decide if more tests are needed. Your baby may need an X-ray or an electrocardiogram ("EKG"), and/or an ultrasound. An ultrasound of the heart is called a heart echo or echocardiogram.

Your health care provider may refer your baby to a pediatric heart specialist (cardiologist) or other specialists.

A low oxygen level does not always mean that a baby has CCHD. Some healthy babies can have a low oxygen level reading while their heart and lungs are adjusting after birth. There could be other conditions that can cause your baby to have this test result.

What do parents need to know?

Most babies who pass the pulse oximetry screening will not have CCHD warning signs. Parents should watch for warning signs such as bluish color to the lips or skin, grunting sounds when breathing, fast breathing, nasal flaring, poor feeding, extreme sleepiness, and poor weight gain. If your baby has any of these signs, call your baby's health care provider right away.

Who can I contact if I have more questions about newborn screening for CCHD?

Ask your baby's health care provider about newborn screening or visit:

Centers for Disease Control and Prevention

cdc.gov/heart-defects/screening

New York State Department of Health

health.ny.gov/community/infants_children/critical_congenital_heart_disease_screening/