

Information for Parents and Guardians

Pulse Oximetry Screening for Critical Congenital Heart Disease (CCHD)

What is Newborn Screening?

Most babies are born healthy with no serious problems. Newborn screening is a way to find babies who have serious medical conditions that need urgent treatment. Newborn screening pulse oximetry can help find critical heart conditions in newborns.

What is Critical Congenital Heart Disease?

Critical Congenital Heart Disease (CCHD) is a medical problem that 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?

Some babies with a heart defect can appear healthy at first. If these babies are sent home before their problem is found, they are at risk for serious illness or death.

How is screening for CCHD done?

Pulse oximetry, sometimes called pulse ox, is a test to determine the amount of oxygen in the baby's blood and pulse rate. Pulse oximetry is fast, easy, and does not hurt. A small soft sensor is wrapped around the baby's hand and foot to measure the heart rate and oxygen level in the blood. 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 for 24 hours allows the baby's heart and lungs to fully adjust to life outside his or her mother.

What happens if the pulse oximetry reading is low?

Some babies will have a low oxygen level reading. Your doctor will determine if further testing is needed to look for CCHD, such as an ultrasound of the heart (also called echocardiogram or heart echo). A low oxygen reading does not always mean that the baby has CCHD. Some healthy babies can have a low pulse oximetry reading while their heart and lungs are adjusting after birth. There could be other conditions that can cause your baby to have a low oximetry test result.

What do parents need to know?

Most babies who pass the pulse oximetry screening will not have CCHD. Warning signs that all parents should watch for are: bluish color to the lips or skin, grunting sounds with breathing, fast breathing, poor feeding, extreme sleepiness, and poor weight gain. If you notice any of these signs in your baby please contact your baby's health care provider right away.

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

Ask your baby's doctor about newborn screening or visit the CDC's website at:
www.cdc.gov/ncbddd/pediatricgenetics/pulse.html

