

# Newborn Pulse Oximetry Screening For Critical Congenital Heart Disease (CCHD)

## What does a low result mean?

### What is a pulse oximetry screen?

Pulse oximetry (also called “pulse ox”) is a simple test to measure oxygen in the blood. Pulse ox is done using a small sensor placed on the baby’s right hand and one foot. Pulse ox looks for low oxygen levels in the blood. Screening is a way to find critical heart conditions in newborns.

### Your baby has a low pulse ox screen. *Now what?*

**A low pulse oximetry result does not mean your baby has critical congenital heart disease (CCHD). It means more tests are needed.**

A low blood oxygen level means that your baby **may** have critical congenital heart disease (CCHD) or other problems. You will discuss plans for more testing with your baby’s medical team. Different types of tests may be needed, for example:

- Heart ultrasound (also called “echocardiogram” or “heart echo”)
- Blood tests
- Chest x-ray
- Tests for infection

### What is a heart echo?

A heart echo is an ultrasound of the heart. It uses sound to make a picture of the heart. The picture will be read by a doctor. You will discuss results and next steps with your baby’s medical team. For the safety of your baby it is important to follow the medical team’s instructions for testing and follow-up.

### Michigan Resources and Support

For questions contact:  
**Michigan Newborn Screening Program**  
Nurse Consultant  
Toll-free: 1-866-673-9939  
Email: [newbornscreening@michigan.gov](mailto:newbornscreening@michigan.gov)  
[www.michigan.gov/cchd](http://www.michigan.gov/cchd)

### What is CCHD?

Critical congenital heart disease (CCHD) means that the heart or major blood vessels did not form correctly before birth. The heart may not work well. A baby with CCHD may not have enough oxygen in the blood. The body needs oxygen to grow and be healthy.

CCHD may or may not run in families.

### What problems can CCHD cause?

CCHD is different for each child. CCHD needs urgent care. Some babies with CCHD may have:

- Fast, difficult breathing
- Grunting sounds with breaths
- Bluish coloring of lips
- Poor eating
- Extreme sleepiness
- Heart murmur

### What if my child has CCHD?

Children with CCHD should see their regular doctor and a doctor who specializes in children with heart disease (called a “pediatric cardiologist”). Your child’s medical team will talk to you about treatment options, if needed.

Treatment for CCHD varies. It can include:

- Medicine
- Medical procedures
- Surgery

Prompt and careful treatment helps most children with CCHD live the healthiest lives possible.

**American Heart Association,**  
[www.heart.org/congenitalheart](http://www.heart.org/congenitalheart)

**Children’s Special Health Care Services**  
Toll-free: 1-800-359-3722  
[www.michigan.gov/cshcs](http://www.michigan.gov/cshcs)

