

Critical Congenital Heart Disease Screening Program

FREQUENTLY ASKED QUESTIONS

What is pulse oximetry?

Pulse oximetry (ox-eh-mah-tree) is a simple and painless test that measures how much oxygen is in the blood. Another term for pulse oximetry is “pulse ox.”

How is pulse ox performed?

The pulse ox is placed by a sticky strip, like a band-aid™, with a small red light, or “sensor,” on the baby’s hand or foot. The sensor is attached to a wire, which is attached to a special monitor that shows the pulse ox reading. The pulse ox test takes just a few minutes to perform when a baby is still, quiet, and warm. If a baby is crying, squirming, or cold it may take longer or not be possible. You can help comfort your baby and keep him or her warm, calm, and quiet while the test is being performed.

What is congenital heart disease (CHD)?

CHD is a problem in the structure of the heart or the blood flow through the heart. CHD is the most common birth defect and the cause is not really known. Some forms of CHD need to be detected and repaired early; these are called serious or “critical” CHDs.

Why is pulse oximetry used to screen for serious CHD?

Pulse ox is used to measure how much oxygen is in the blood. Pulse ox is routinely used and can be used to monitor an infant’s oxygen level during a procedure or treatment. It can also be helpful in determining if an infant’s heart and lungs are healthy.

Pulse ox can also help to identify babies with low levels of oxygen in their blood that may have serious CHD. A doctor or nurse practitioner may ask for more testing such as an ultrasound of the heart, or echocardiogram (or “echo”) when a low pulse ox reading is identified. The echo will screen for a serious problem in the structure of the heart or the blood flow through the heart. Pulse ox can identify a baby with serious CHD before he or she leaves the newborn nursery.



Can the pulse ox test hurt my child?

The pulse ox test is non-invasive and painless. It usually does not hurt the child.

When will the pulse ox test be performed?

The pulse ox test will be done after the baby is 24 hours old.

What is a normal reading?

Pulse ox readings in the hand and foot that are 95 to 100 percent and equal to or less than 3% different from than each other are normal in healthy children. Children with heart or lung problems may have lower readings. A low pulse oximetry reading can be normal in newborns whose lungs and heart are adjusting after birth. If your child has a problem with his or her heart or lungs, your doctor or nurse will tell you what a normal pulse ox range is for your child. It is possible that your baby's doctor will order additional tests.

Can a baby with serious CHD have a normal pulse ox reading?

It is possible that the pulse ox test will not detect all forms of problems in the baby's heart. Your baby should continue to have normal visits with his or her primary care doctor. If a problem with the heart is suspected, your primary care doctor will advise you.

If you notice any of the following signs or symptoms, you should contact your primary care provider promptly:

- Tires easily during feedings (i.e. falls asleep before feeding finishes)
- Sweating around the head, especially during feeding
- Fast breathing when at rest or sleeping
- Pale or bluish skin color
- Sleeps a lot - not playful or curious for any length of time
- Puffy face and/or feet
- Often irritable, difficult to console

What if I have questions or do not want to have my baby screened for serious heart problems?

If you have questions, you should ask the doctor or nurse practitioner that is providing your prenatal care or the doctor or nurse caring for your baby after he or she is born. If you do not want your baby screened for serious heart problems you should tell your doctor or nurse when you are in the hospital to deliver your baby.