CRITICAL CONGENITAL HEART DISEASE SCREEN (CCHD)

ALABAMA Newborn Screening PROGRAM

ALABAMA PUBLIC HEALTH

CCHD Screen at Birth Off Supplemental Oxygen
Obtain pulse oximetry reading on right hand and either foot (in parallel or direct sequence) at 24 hours or later (infant should be on room air, warm and quiet, with screening sites clean and dry)

Immediate Fail
Pulse ox reading less than 90% in right hand or foot

Fail
Pulse Ox less than 95% in both the right hand and foot and a saturation difference of 4% or greater

Pass
Pulse ox reading of 95% or higher in right hand or foot AND Saturation Difference of 3% or less between the right hand and foot readings

Repeat screen in 1 hour

PASS

Provide Routine Newborn Care

FAIL - Do NOT repeat Pulse Ox AND proceed with immediate clinical assessment.

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Immediate Fail
Pulse ox less than 90

- Notify physician and proceed with immediate clinical assessment.
- If no etiology is found, immediate echocardiogram interpreted by a pediatric cardiologist is indicated. **This may require transfer to a NICU with pediatric cardiology services.**
- Report failed pulse ox screen reporting form to the Alabama Department of Public Health. You may fax the form to (334) 206-3791 or electronically submit via the web portal as required by state law.

Failed Screen

- Perform comprehensive evaluation for causes of hypoxemia including infectious and pulmonary pathology.
- If no other etiology is found, consultation with pediatric cardiology or neonatology is indicated to arrange for a diagnostic echocardiogram to be interpreted by a pediatric cardiologist. This may require telemedicine, transfer to a NICU with pediatric cardiology services, or discussion with cardiology services to schedule a timely outpatient echocardiogram. Physician to physician communication recommended.
- Report failed pulse ox screen reporting form to the Alabama Department of Public Health. You may fax the form to (334) 206-3791 or electronically submit via the web portal as required by state law.

- This screening algorithm should not take the place of clinical judgment or customary clinical practice.
- A negative screen does not rule out heart disease.
- Optimal results are obtained using a motion-tolerant pulse oximeter that reports functional oxygen saturation, has been validated in low perfusion conditions, has been cleared by the FDA for use in newborns, has a 2% root mean-square accuracy, and is calibrated regularly.
- For more information see: Kemper, AR, Mahle, WT, Martin, GR et al; Strategies for Implementing Screening for Congenital Heart Disease. Pediatrics.2011. available at: http://pediatrics.aappublications.org/content/early/2011/10/06/peds.2011-1317