

# Critical Congenital Heart Disease (CCHD)

## Newborn Screening Algorithm



It is best practice to screen when an infant is on room air and has no supplemental oxygen requirement.

### Measurement one

Pulse ox on right hand AND one foot around 24 hours of age (or earlier if being discharged)

#### FAIL

Pulse ox of 89% or less in either right Hand OR one Foot

**ACTION: Do NOT repeat pulse ox AND proceed with immediate clinical assesment**

#### RETEST

a. Pulse ox of 90% to 94% in either the right hand OR one foot  
**OR**  
b. A difference of 4% or more between the right hand and foot

**ACTION: Repeat pulse ox measurements in one hour**

#### PASS

a. Pulse ox of 95% or more in right hand and and foot  
**AND**  
b. A difference of 3% or less between the two

**ACTION: Do NOT repeat pulse ox AND provide routine care**

### Measurement two

Pulse ox on right hand AND one Foot one hour after measurement one

#### FAIL

a. Pulse ox of 94% or less in either the right hand OR one foot  
**OR**  
b. A difference of 4% or more between the two

**ACTION: Do NOT repeat pulse ox AND proceed with immediate clinical assesment**

#### PASS

a. Pulse ox of 95% or more in right hand and one foot  
**AND**  
b. A difference of 3% or less between the two

**ACTION: Do NOT repeat pulse ox AND provide routine care**

## EDUCATE FAMILIES

CCHD newborn screening may not find all types of problems in a baby's heart. Babies should continue to have regular visits with the doctor to monitor health.

**If the baby has any of the following symptoms, bring the baby back to the hospital right away:**

- Tires out when feeding
- Breathing fast or not breathing well
- Gray or blue color
- Seems extra sleepy

## REFERENCES

TXPOP toolkit: A Joint Educational Initiative of The University of Texas Health Science Center at San Antonio/Department of Pediatrics, Baylor College of Medicine/Department of Pediatrics and Texas Department of State Health Services

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