

# PULSE OXIMETRY SCREENING PROTOCOL FOR CRITICAL CONGENITAL HEART DISEASE



## Newborn Prescreen Checklist

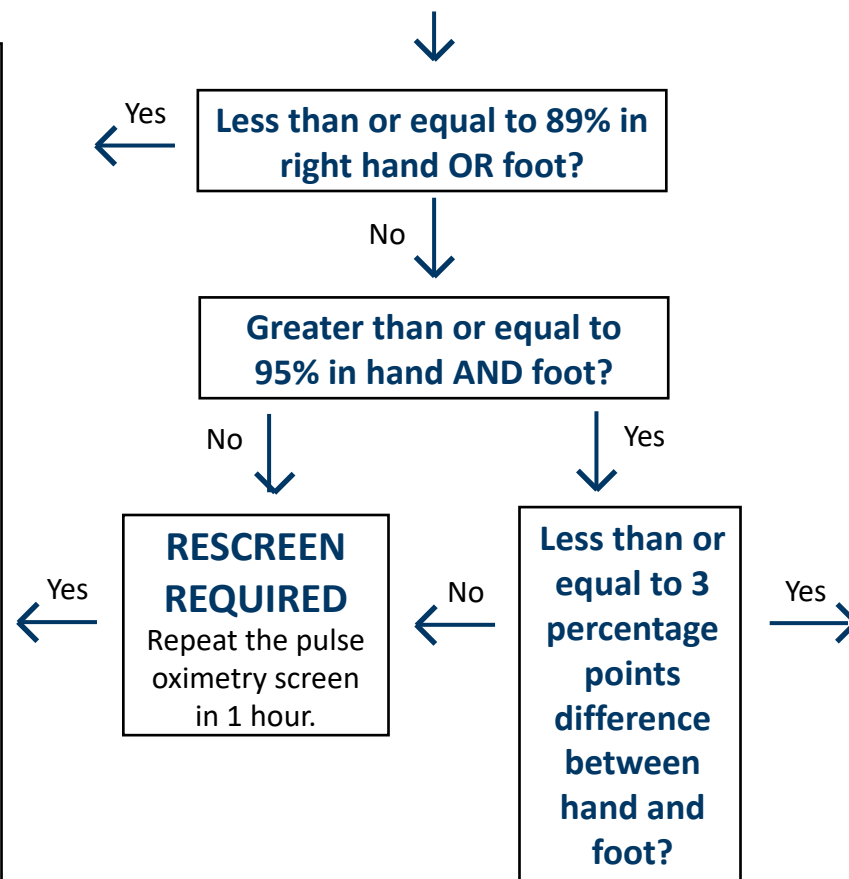
- ☐ At least 24 hours of age  
If being discharged before 24 hours of age, screen as close to discharge as possible
- ☐ Breathing room air
- ☐ Pediatric probe on right hand and either foot
- ☐ No clinical signs or prenatal ultrasound findings of CCHD; cardiac evaluation is preferred over screening in these situations

## FAIL

- Notify the medical provider of the failed screen and the need for further evaluation.
- Consult with a pediatric cardiologist.
- Evaluate the infant for other causes of the low oxygen saturation (e.g., infection, pulmonary hypertension, pneumonia).

## PASS

- Notify the medical provider of the passed screen. Infant could still have cardiac disease.
- Signs and symptoms of CCHD can include rapid breathing, cyanosis, fatigue, poor feeding, and poor weight gain.
- Regardless of passing result, if any of these clinical results are present, proceed with cardiac evaluation.



## Remember

Report results to the Newborn Screening Program.  
All results should be reported electronically using MNScreen or through secure fax.  
651-215-6285

# CCHD Protocol: Text Version of Flowchart

## Newborn prescreen checklist

- If the newborn is at least 24 hours of age
  - If being discharged before 24 hours of age, screen as close to discharge as possible
- Breathing room air
- Pediatric probe on right hand and either foot
- No clinical signs or prenatal ultrasound findings of CCHD; cardiac evaluation is preferred over screening in these situations
- If all these qualifications are met, continue through the protocol

## An infant fails pulse oximetry screen if any of the following are true

- The oxygen saturation is less than or equal to 89% in right hand or foot
- The oxygen saturation is less than or equal to 95% in hand and foot
  - If the oxygen saturation is less than or equal to 95% in hand and foot then a rescreen is required in 1 hour
- If the oxygen saturation levels are greater than or equal to 95% in hand and foot, and are also more than 3 percentage points difference between hand and foot
  - If this is true, a rescreen is required in 1 hour

## If the baby fails the pulse oximetry screen

- Notify the medical provider of the failed screen and the need for further evaluation
- Consult with a pediatric cardiologist
- Evaluate the infant for other causes of the low oxygen saturation (infection, pulmonary hypertension, pneumonia)

## An infant passes the pulse oximetry screen if the following are true

- If the oxygen saturation is greater than or equal to 95% in the right hand or foot but the difference in percentage points between hand and foot is less than or equal to 3 percentage points

## **If an infant passes the pulse oximetry screen**

- Notify the medical provider of the passed screen; the infant could still have cardiac disease
- Signs and symptoms of CCHD can include rapid breathing, cyanosis, fatigue, poor feeding, and poor weight gain
- Regardless of the passing result, if any of these clinical results are present, proceed with cardiac evaluations

## **Remember**

- Report results to the Newborn Screening Program. All results should be reported electronically using MNScreen or through secure fax at 651-215-6285