

PULSE OXIMETRY SCREENING PROTOCOL FOR CRITICAL CONGENITAL HEART DISEASE



Newborn Prescreen Checklist

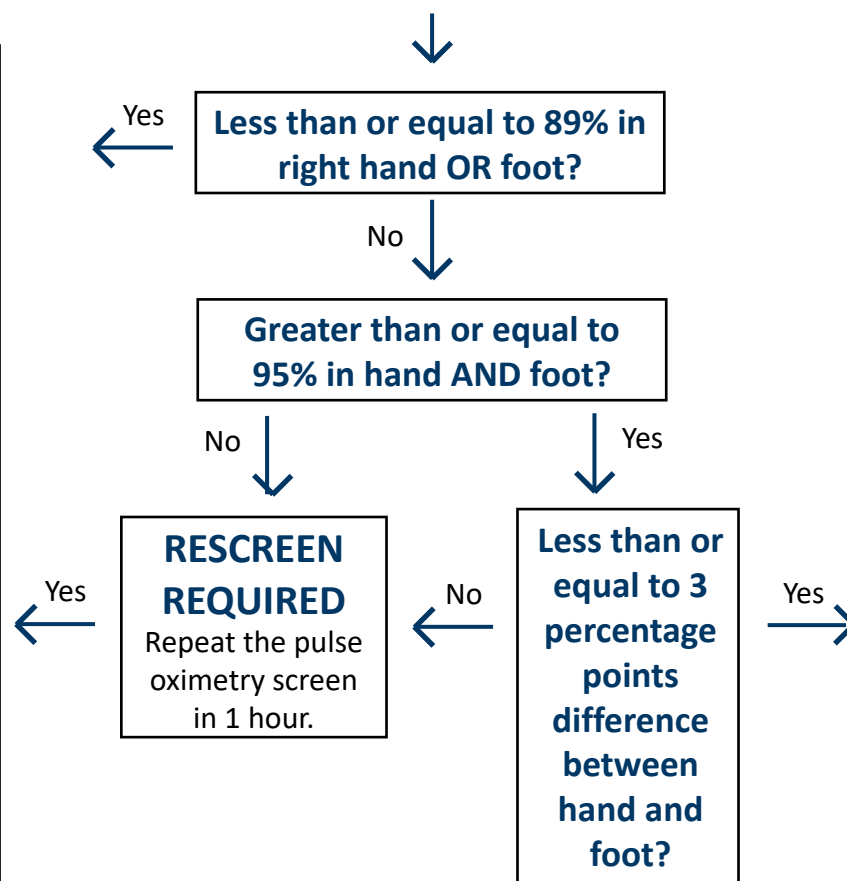
- ☐ At least 24 hours of age
If being discharged before 24 hours of age, screen as close to discharge as possible
- ☐ Breathing room air
- ☐ Pediatric probe on right hand and either foot
- ☐ No clinical signs or prenatal ultrasound findings of CCHD; cardiac evaluation is preferred over screening in these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