



- ♥ Congenital Heart Disease (CHD) is the most common birth defect affecting about 9/1,000 live births. Early detection of critical congenital heart defects (CCHDs) is crucial to reduced morbidity, better surgical outcome, and improved survival.
- ♥ Pulse oximetry screening detects heart defects that are usually associated with hypoxia. Screening is most likely to detect these seven types of CCHDs:
  - hypoplastic left heart syndrome, pulmonary atresia (with intact septum), tetralogy of Fallot, total anomalous pulmonary venous return, transposition of the great arteries, tricuspid atresia, and truncus arteriosus.
- ♥ Other conditions causing hypoxemia may also be detected at the time of screening.
- ♥ CCHD screening using pulse oximetry is mandated even if a prenatal diagnosis of CHD has been made or a neonatal echocardiogram has been obtained.
- ♥ In all cases, a screening must be performed prior to discharge to home or transfer out of the hospital at greater than 24 hours of age. Screening should be performed as soon as medically appropriate in the NICU.
- ♥ In cases of early discharge to home before 24 hours of age, screening is recommended as close to discharge as possible.
- ♥ For best results, ensure the infant is calm, warm and awake (or not in deep sleep) for the screening.
- ♥ It is possible for an infant with CCHD to have a normal pulse ox reading at the time of the screen. A negative screen does not rule out all heart disease.
- ♥ Signs and symptoms of CHD include feeding problems, poor weight gain, sweating around the head especially during feeding, tachypnea, increased sleepiness, and color changes.
- ♥ The results of the screening should be communicated to the parents before discharge.
- ♥ Screening results should be included in the discharge summary for the primary care provider and in the hand off report to the receiving hospital if infant is transferred.
- ♥ **The screening should not take the place of customary clinical practice, evaluation or intervention.**
- ♥ **For all FAILED screens, refer to the NJ recommended screening algorithm and/or unit policy for timely evaluation before discharge.**
- ♥ **Failed screens must be reported to the NJ Birth Defects Registry.**

### NJ Recommended Screening Algorithm (abridged)

**FAIL= 89% or less pulse ox reading in EITHER hand or foot. Do not re-screen.**

**FAIL= 94% or less pulse ox in EITHER hand or foot, OR a difference of 4% or more between hand and foot after repeating X 2.**

**RESCREEN= 94% or less pulse ox in EITHER hand or foot, OR a difference of 4% or more between hand and foot. Repeat in 1 hour up to 2 X for total of 3.**

**PASS= 95-100% in BOTH hand and foot AND a difference of 3% or less (initial or repeat).**