

Screening for Critical Congenital Heart Disease in Newborns Using Pulse Oximetry – New Jersey's Experience

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Pulse Oximetry Screening Legislation

P.L. 2011, Chapter 74

“The Commissioner of Health and Senior Services shall require each birthing facility licensed by the Department of Health and Senior Services to perform a pulse oximetry screening, a minimum of 24 hours after birth, on every newborn in its care.”

- Signed June 2, 2011
- Effective Date -August 31, 2011
90 days after enactment
- Unfunded Mandate



Role of NJDHSS

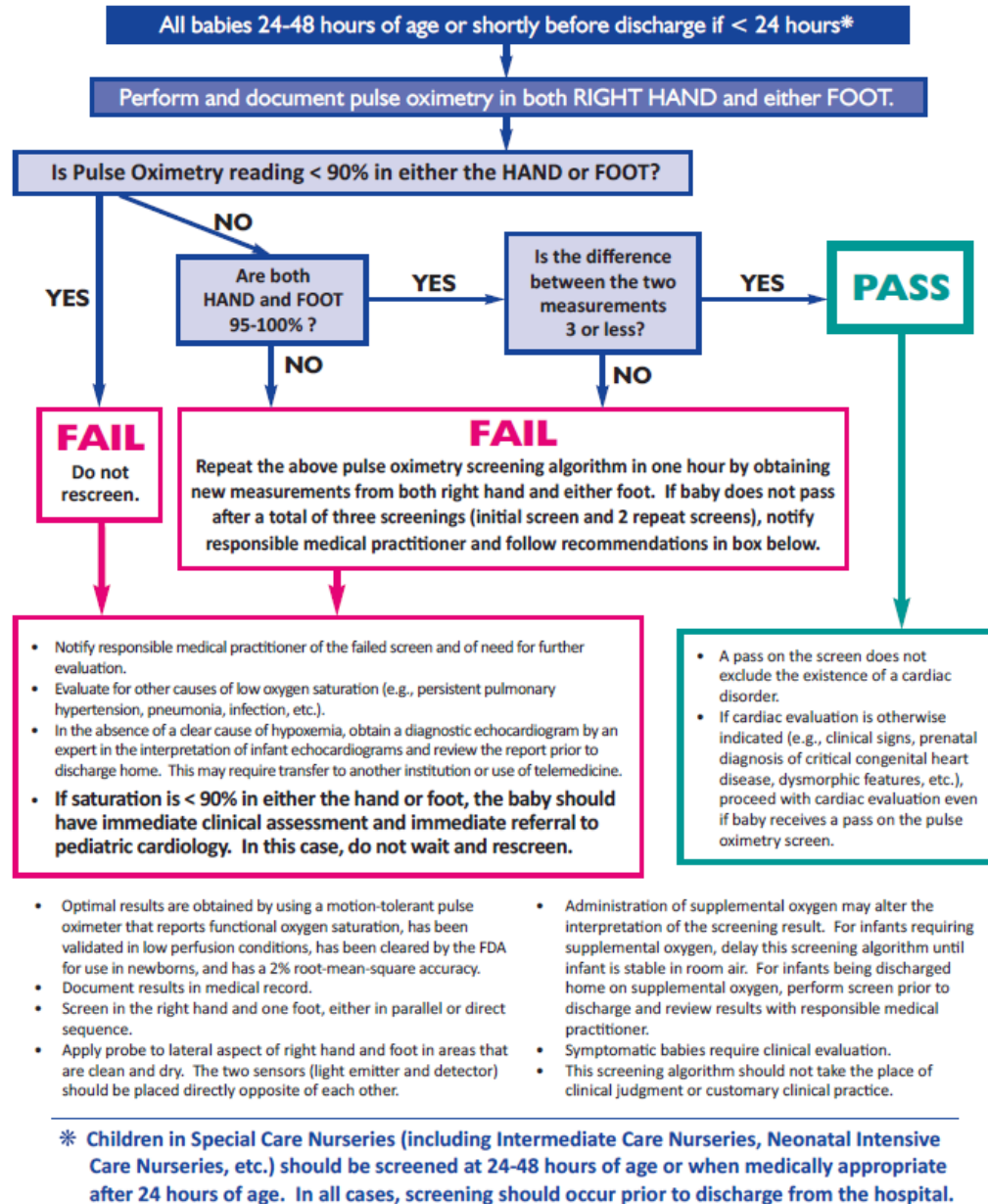
- Mandated to screen, not how to screen
- Point of care test
 - Hospitals responsible for ensuring follow up, not NJDHSS
 - No active follow up as with biochemical NBS
- Divisional Responsibilities
 - Division of Licensing
 - Oversight of hospital compliance with legislation
 - Newborn Screening Program
 - Initial charge to develop Best Practices Guidelines
 - Expanded to support and guide implementation efforts to build an effective screening & surveillance program

Pulse Oximetry Screening Implementation

- First steps:
 - NJDHSS convened Critical Congenital Heart Disease Screening Working Group
 - Initial focus to develop and distribute recommended screening protocol

Screening Algorithm for Critical Congenital Heart Disease

Recommendations from the New Jersey Department of Health and Senior Services



Adapted from the Secretary's Advisory Committee on Heritable Diseases in Newborns and Children (SACHDNC) Expert Panel Workgroup's Preliminary Recommendations, Jan. 2011. 8-19-11 (A)

Education/Training

- Distributed Protocols
- Conducted 2 webinars
- Frequent communication with hospitals
- Intensive efforts being planned (pending resources)
 - Best Practices Guidelines
 - Development of parent education handout
 - Train the trainer model for nursing education
 - Standardized slide deck for physicians conferences at each hospital

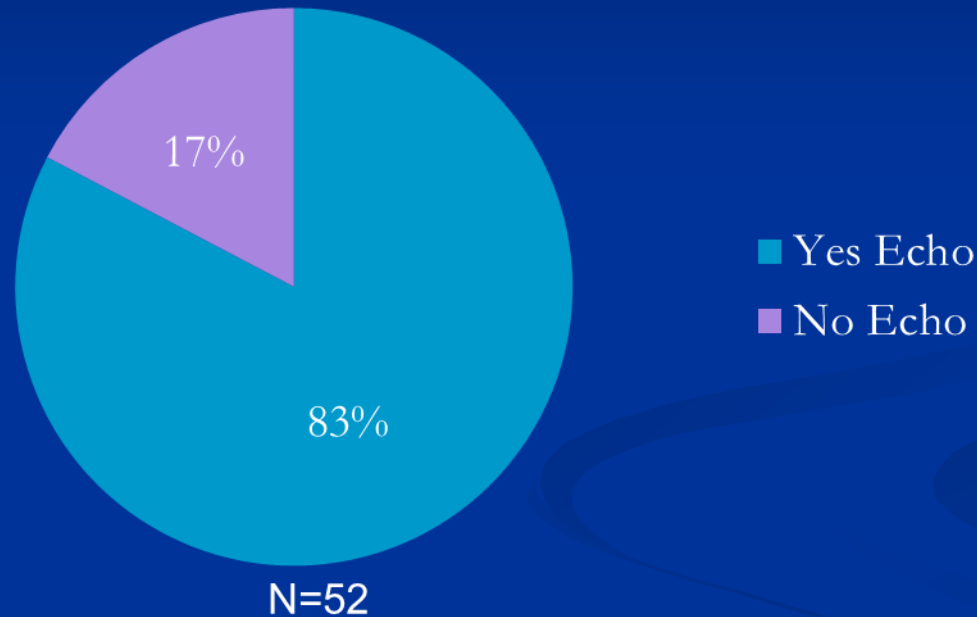
Surveillance

- Short Term Plan:
 - Quarterly aggregate data
 - # births
 - # screened
 - Birth Defects Registry –all failed screens
 - Screen results, results of evaluation, prenatal history, history of symptoms
- Long Term Plan
 - Electronic Birth Reporting System
 - Birth Defects Registry

What We Know...

Hospital Survey- Echo Availability

August, 4, 2011



Does your facility have the ability to do an echocardiogram on site
(by someone with expertise in conducting echocardiograms in newborns)?

Hospital Survey – Post Implementation

November 2, 2011

- 25/52 hospitals responded
 - All utilizing NJDHSS protocol
 - Overall implementation was relatively smooth
 - Short implementation time
 - Cost
 - Documentation
 - Most stated no significant issues

PRELIMINARY DATA

August 31, 2011 – November 30, 2011

Number of live births	24,807
Number of infants screened	24,343
Percentage of infants screened	98.1%
Number of Failed Screens	9
Number of true cases	2

■ Education

- Need for more intensive training
- Need for educational materials

■ Surveillance system

- Accuracy of data—steep learning curve
- Aggregate data
- Quality assurance

Strengths

- >95% of infants screened in first 90 days
- Mechanism to collect data for program evaluation
- Covered a lot of ground with very limited resources--both financial and staff
- Committed working group, dedicated staff and established connections with birthing facilities

“It is because of your law that our son’s life was saved, and my husband and I are very grateful to you...”

Letter to Governor Christie from the family of Dylan Gordon



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