

# Newborn Pulse Oximetry Screening for Critical Congenital Heart Disease Flow Chart

*All newborns should receive pulse oximetry screening unless they meet exception criteria.*

*See the NBS Exceptions Pulse Oximetry Guide for more information.*

## Initial Screen

Perform pulse oximetry on RIGHT hand AND EITHER foot at 24-48 hours after birth (closer to 24 hours is best).

### PASS

Pulse oximetry result of 95% or higher in RIGHT hand AND EITHER foot  
AND  
A difference of 3% or less between the RIGHT hand AND EITHER foot

#### Actions:

- Document pulse oximetry results on the newborn screening card.
- Newborn pulse oximetry screening is complete.



### RESCREEN

Pulse oximetry result of 90% to 94% in either the RIGHT hand OR EITHER foot  
OR  
A difference of 4% or more between the RIGHT hand AND EITHER foot

#### Actions:

- Document pulse oximetry results on the newborn screening card.
- Repeat the pulse oximetry screen in 1 hour.

### FAIL

Pulse oximetry result of 89% or less in either the RIGHT hand OR EITHER foot

#### Actions:

- Do not repeat pulse oximetry screening.
- Document pulse oximetry results on the newborn screening card.
- Practice change: Initiate clinical workup, at minimum an echocardiogram is to be completed.
- Document echocardiogram results on pink copy of the newborn screening card.



## Second Screen

Perform pulse oximetry screen a second time, 1 hour after the initial screen was performed.

### PASS

Pulse oximetry result of 95% or higher in RIGHT hand AND EITHER foot  
AND  
A difference of 3% or less between the RIGHT hand AND EITHER foot

#### Actions:

- Document pulse oximetry results on the newborn screening card.
- Newborn pulse oximetry screening is complete.



### FAIL

Pulse oximetry result of 89% or less in either the RIGHT hand OR EITHER foot.  
OR  
Pulse oximetry result of 94% or less in either the RIGHT hand OR EITHER foot.  
OR  
A difference of 4% or more between the RIGHT hand AND EITHER foot.

#### Actions:

- Do not repeat pulse oximetry screening.
- Document pulse oximetry results on the newborn screening card.
- **Practice change:** Initiate clinical workup, at minimum an echocardiogram is to be completed.
- Document echocardiogram results on pink copy of the newborn screening card.

