

Pulse Oximetry Newborn Screening Protocols for Healthy Infants (Born at 35+ Weeks Gestation)

Obtain pulse oximetry reading on right hand (RH) and one foot after 24 hours of age

PASS

- Pulse oximetry readings $\geq 95\%$ in right hand or foot
- AND**
- Difference of $\leq 3\%$ between right hand & foot

Normal newborn care

FAIL

- Pulse oximetry readings $< 95\%$ in both right hand & foot
- OR**
- Difference of $> 3\%$ between right hand & foot

Repeat pulse oximetry readings in 1 hour

FAIL

Repeat pulse oximetry readings in 1 hour

FAIL

Refer infant for clinical assessment

PASS

PASS

Reminders for Screeners

- Confirm that the infant is at least 24 hours of age.
- Describe pulse oximetry screening to the infant's parent(s)/guardian(s). Remind parents that:
 - Pulse oximetry screening is painless & will not hurt their baby.
 - It is possible for a child to have a normal pulse oximetry result & still have a congenital heart defect (CHD).
- Perform the screening in a quiet, peaceful environment. Keep the infant warm & calm.
- Select screening sites that are clean & dry.

Clinical Assessment

- **Babies with saturation $< 90\%$ in right hand or foot should be immediately referred for clinical assessment.**
- **Babies with 3 failed readings** (pulse oximetry $< 95\%$ in right hand & foot **OR** $> 3\%$ difference between right hand & foot) should receive:
 1. Clinical assessment (infectious & pulmonary pathology should be excluded)
 2. Complete echocardiogram
 3. Referral to Pediatric Cardiology
 - Immediately if symptomatic
 - In a timely manner if asymptomatic



Indiana State
Department of Health