



<p>Team Name: Regional Obstetrical Team</p> <p>Team Lead: Regional Director – Acute Care</p> <p>Approved by: Executive Director – Acute &amp; Chief Nursing Officer</p>	<p>Reference Number: CLI.5810.PL.008</p> <p>Program Area: Obstetrics</p> <p>Policy Section: General</p>
<p>Issue Date: November 14, 2019</p> <p>Review Date:</p> <p>Revision Date:</p>	<p>Subject: Newborn Pulse Oximetry Monitoring Upon Discharge</p>

*Use of pre-printed documents: Users are to refer to the electronic version of this document located on the Southern Health-Santé Sud Health Provider Site to ensure the most current document is consulted.*

**POLICY SUBJECT:**

Newborn Pulse Oximetry Monitoring Upon Discharge.

**PURPOSE:**

To detect critical congenital heart disease in newborns prior to discharge from the hospital using a non-invasive pulse oximetry screen.

**BOARD POLICY REFERENCE:**

Executive Limitation (EL-01) Global Executive Restraint and Risk Management  
 Executive Limitation (EL-02) Treatment of Clients

**POLICY:**

- Detecting critical congenital heart disease in newborns prior to their discharge from the hospital decreases morbidity, mortality and disability.
- Often newborns will not present with clinical symptoms prior to discharge from the hospital post birth but critical congenital heart disease can be detected through pulse oximetry screening.
- Pulse oximetry screening is a safe, non-invasive, easy to perform procedure.

**DEFINITIONS:**

Critical congenital heart disease – a more severe congenital malformation, often involving duct-dependant lesions requiring intervention early in life for optimal outcomes.

**IMPORTANT POINTS TO CONSIDER:**

- All term and late preterm newborns are routinely screened prior to discharge.
- Pulse oximetry screening is performed between 24 and 36 hours of life. If a newborn is discharged home prior to 24 hours of life, perform screen at the time of discharge. If the

newborn fails, encourage parents to remain in hospital and either repeat the screen in one hour (as per the algorithm) or at 24 hours of age (preferred). If the parents decide to leave despite the potential increase risk for cardiac problems, ensure the newborn primary care provider is notified of the failed screen.

- Screening done before 24 hours has an increased false positive rate but is preferable to no screening at all.
- A failed screen requires further assessment and may include: 4 limb blood pressures; an electrocardiogram; chest x-ray; referral to a neonatologist or pediatrician, a transfer to neonatal intensive care in Shared Health/Winnipeg Regional Health Authority (WRHA).

#### **PROCEDURE:**

- 1) Apply pulse oximeter to right hand of the newborn and ensure reliable reading is established, monitor for 30 seconds and record the highest saturation rate.
- 2) Apply pulse oximeter to either foot of the newborn and ensure a reliable reading is established, monitor for 30 seconds and record the highest saturation rate.
- 3) Follow the Pulse Oximetry Flowchart (CLI.5810.PL.008.SD.01).
- 4) Document on the Newborn Care Map (CLI.5810.FORM.003).
- 5) Report results to the primary care provider.
- 6) Borderline or failed screens – notify Primary Care Provider who will consult neonatology in Shared Health/WRHA.

#### **EQUIPMENT/SUPPLIES:**

Pulse oximeter & neonatal probes

#### **SUPPORTING DOCUMENTS:**

[CLI.5810.PL.008.SD.01](#) Newborn Pulse Oximetry Flowchart  
[CLI.5810.FORM.003](#) Newborn Care Map

#### **REFERENCES:**

Narvey, M., Wong, K., Fournier, A. (2017). Pulse oximetry screening in newborns to enhance detection of critical congenital heart disease. Practice Point. *Paediatrics & Child Health*, 2017, 494-498. doi: 10.1093/pch/pxx136Practice Point

Women's Health & Neonatal Clinical Practice Guideline. (Oct 2017). Pulse oximetry screening for critical congenital heart disease in newborns.