

NSO PULSE OXIMETER INFORMATION and REQUIREMENTS



If your pulse oximeter was supplied by Newborn Screening Ontario:

- The monitor is your property; your responsibility to maintain
- Service and warranty issues are to be managed through the respective vendor and NOT through Newborn Screening Ontario (Please contact your biomedical department as an initial step, where applicable)
 - COVIDIEN NELLCOR EQUIPMENT:
 - rs.canservice@medtronic.com
 - OR
 - 1-877-644-892 (option 2, service)
 - MASIMO EQUIPMENT:
 - TECHSERVICE-CA@masimo.com
- Consumables for screening (probes and wraps) will be provided through Newborn Screening Ontario annually on a volume-based approach. Please see the information posted on the NSO website or contact NSOCCHD@cheo.on.ca for more information.

If your pulse oximeter was NOT supplied by Newborn Screening Ontario:

As part of assuring quality for CCHD screening in Ontario, NSO has developed a list of standards for pulse oximeters used in CCHD screening. Your biomedical engineering department or vendor will be able to provide you with specifications for your pulse oximeter(s) to ensure that your monitor meets the requirements.

Pulse Oximeter Requirements

1. Pulse oximeters must report functional oxygen saturation (SpO₂).
2. Pulse oximeters must be motion-tolerant
3. Pulse oximeters must be validated by the manufacturer for use in low perfusion conditions
4. Pulse oximeters must have a documented accuracy range of +/- 3% or less in the 70-100% reading range and +/- 3% or less in low perfusion conditions
5. Pulse oximeters must have an indicator of signal reliability (e.g., plethysmograph (pleth) line or waveform, audible heartbeat, or signal indicator)
6. Probes must be designed for use in neonatal patients
7. Pulse oximeters must have built in quality assurance and/or system validation checks.
8. Pulse oximeters must be cleared by Health Canada and/or the U.S. Food and Drug Administration for use in newborns and conform to relevant standards (FDA guidance document 1605: Pulse Oximeters – Premarket Notification Submissions [510(k)s]: Guidance for Industry and Food and Drug Administration Staff)