NELLCOR SENSOR SELECTION GUIDE

Sensors

Adhesive Sensors

Check site at least every 8 hours as directed.

Sterile in unopened, undamaged package.

					
	D-25*/D-25L*	**N-25/N-25LF***	**I-20/I-20LF***	**D-20***	**R-15**
	Oxisensor® II Adult	***Oxisensor II*** Neonatal/Adult	***Oxisensor II*** Infant	***Oxisensor II*** Pediatric	***Oxisensor II*** Adult Nasal
Patient Size	>30 kg	<3 kg or >40 kg	3–20 kg	10–50 kg	>50 kg

Check site at least every 8 hours as directed.

Sterile in unopened, undamaged package.

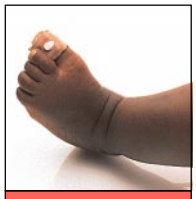
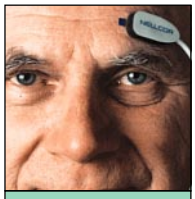
					
	A*	**N**	**I**	**P***	
	OxiCliq® Adult	***OxiCliq*** Neonatal/Adult	***OxiCliq*** Infant	***OxiCliq*** Pediatric	
Patient Size	>30 kg	<3 kg or >40 kg	3–20 kg	10–50 kg	

* Latex free.

These sensors are eligible for the Sensor Recycling Program. For more information on enrolling in the program, contact your local Mallinckrodt representative. Currently available in the U.S. only.

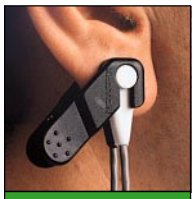
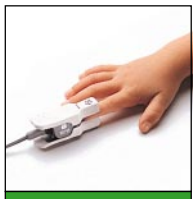
Reusable Sensors

Change site at least every 4 hours as directed.

					
	DS-100A*	**OXI-A/N**	**OXI-P/I***	**RS-10**	
	Durasensor® Adult	***Oxiband®*** Adult/Neonatal	***Oxiband*** Pediatric/Infant	***RS-10 Adult*** Reflectance	
Patient Size	>40 kg	<3 kg or >40 kg	3–40 kg	>40 kg	

Change site at least every 4 hours as directed.

PediCheck for attended spot check only (not to exceed 20 minutes).

					
	D-YS	**D-YSE***	**D-YSPD***		
	Dura-Y® Multisite	***D-YSE*** Ear Clip *Use with Dura-Y sensor*	***PediCheck™*** Pediatric Spot-Check *Use with Dura-Y sensor*		
Patient Size	>1 kg	>30 kg	3–40 kg		

Warning: Carefully read the directions for use provided with Nellcor® sensors for complete description, instructions, warnings, cautions and specifications.

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NELLCOR SENSORS

Basic Principles

The following considerations should be evaluated when choosing a Nellcor sensor for your patient:

- Patient's body weight
- Duration of use (long-term, short-term, spot-check)
- Patient activity
- Infection control concerns

Adhesive and reusable sensors are available.

Tips for Use

- Ensure that the optical components of the sensor are properly aligned as outlined in the directions for use.
- Adhesive sensor sites must be checked at least every 8 hours and moved to a new site if necessary. Reusable sensors must be moved to a new site at least every 4 hours.*
- Adhesive digit sensors may be reused on the same patient, if the adhesive portion attaches without slipping. Replace the sensor whenever the adhesive quality is depleted.
- Reusable sensors should be cleaned between patients. Refer to directions for use.
- When selecting a sensor site, priority should be given to an extremity free of an arterial catheter, blood pressure cuff or intravascular infusion line.

* *PediCheck* for attended spot check only (not to exceed 20 minutes).

PULSE OXIMETRY: CLINICAL CONSIDERATIONS AND RECOMMENDATIONS

Certain conditions may result in pulse oximetry readings that are unreliable, incorrect or less informative. These considerations and associated recommendations are listed below:

Consideration	Recommendation
Motion	Move sensor to a less active site or replace adhesive. Place reflectance sensor on the forehead if the patient is not on a ventilator or not placed in a Trendelenburg or supine position. Adjust averaging time on pulse oximeter if possible. For optimal performance in high-motion environments, use *Oxismart*® technology (N-3000, NBP-290 and NBP-295) or *C-Lock*® ECG synchronization.
Poor Perfusion	Use an adhesive digit sensor or apply an R-15 nasal sensor if the patient is immobile. Protect sensor site from heat loss or rewarm sensor site as permitted by hospital policy.
Venous Pulsation	Position digit sensor at heart level. Avoid restrictive taping. Use care when interpreting SpO_2 values in patients with elevated venous pressure.
Edema	Position the sensor on nonedematous application sites. Otherwise, the fluid in the edematous tissue may cause the light from the LEDs to scatter and affect the SpO_2 readings.
Light Interference	Cover the sensor with an opaque material in the presence of bright light sources, including direct sunlight, surgical lamps, infrared warming lamps and phototherapy lights.
Nail Polish	Remove nail polish (especially brown, blue, green) or apply sensor to unpolished site.
Intravascular Dyes	Use care when interpreting SpO_2 values after injection of intravascular dyes, which may affect the reading.
Dyshemoglobins	Dysfunctional hemoglobins such as carboxyhemoglobin, methemoglobin or sulphhemoglobin are unable to carry oxygen. However, SpO_2 values only report functional saturation—oxygenated hemoglobin as a percentage of *functional* hemoglobin. Therefore, although the SpO_2 values reported by a pulse oximeter may appear normal when dysfunctional hemoglobins are elevated, oxygenation may be compromised due to decreased arterial oxygen content. A more complete assessment of oxygenation beyond pulse oximetry is recommended whenever dysfunctional hemoglobins are suspected.
Anemia	Anemia causes decreased arterial oxygen content by reducing the number of hemoglobins that are available to carry oxygen. Although SpO_2 percentages may be in the "normal" range, an anemic patient may be hypoxic due to reduced hemoglobin levels. The pulse oximeter may fail to provide an SpO_2 reading if hemoglobin levels fall below 5 gm/dl. Correcting anemia can improve arterial oxygen content.

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