

## Veterinary Sensors and Their Placement

This document does not replace NONIN's Operator's Manual. The Operator's Manual must be read, with special attention to the "Warnings", "Cautions", and "Contraindications" section before using a NONIN veterinary pulse oximeter.

When monitoring oxygen saturation (SpO<sub>2</sub>), the sensor site must meet the following criteria:

- » Sensor site must be well perfused.
- » Sensor site must allow light to be transmitted through the tissue. (Skin must not be overly pigmented and fur/feathers etc. may need to be removed.)
- » Sensor site must allow proper attachment of the sensor.

(Note: Certain veterinary drugs may cause reduced perfusion to the sensor site. This could compromise the function of a pulse oximeter.)

### Lingual Sensor (Model 2000SL)

This sensor can be placed on the right side, left side, or the end of the tongue. Wait approximately 10 to 15 seconds for an adequate pulse signal. If you are unable to obtain an SpO<sub>2</sub> reading, move the sensor to another site on the tongue and wait 10 to 15 seconds until an adequate pulse signal is displayed. It is a good idea to secure the cables so the weight of the cable doesn't move the sensor. If you still have difficulty getting an SpO<sub>2</sub> reading, examine the tongue to see if it is quivering. This could be a reaction to certain medications. If the tongue continues to quiver, choose a different sensor site.

#### » The vulva or prepuce\*

If the animal is large enough, it has been reported by some veterinarians that the prepuce or vulva might be an alternate site for the lingual clip sensor. Remember that this site must be well perfused and not pigmented.

#### » Achilles tendon\*

On light colored animals (a color of gray or lighter), an alternate application site may be the Achilles tendon. Remove the hair and make sure the skin is not pigmented.

### Transflectance Sensor (Model 2000T)

The transflectance sensor requires more technique to use than the lingual sensor. Tips for using the transflectance sensor are:

- » If you wrap this sensor too tightly, you may impede perfusion to the sensor site. Wrap this sensor so that it is "snug". If the sensor is wrapped too loosely, it may move and display erroneous readings.
- » The most common site for this sensor is at the base of the tail close to the anus. Be sure there is no hair at this site and that the skin is not pigmented.

\*Possible sensor sites as reported by veterinary professionals.



- » Another site to consider is a pink paw pad\*. Be sure the pink area of the pad will cover the front and back diodes on the sensor. Don't wrap it too tightly. Wait 10 to 15 seconds for an adequate pulse signal. If the transreflectance sensor is used between the toes\*, in the webbed area, make sure to remove any dark hair and position the sensor up against the webbing. Wrap the whole foot with enough pressure to hold the sensor in place, but not enough to impede perfusion.
- » An optional site is the metatarsal\*. There is a spot immediately behind the large pad that has a slight indentation. Remove the hair and wrap the ankle securely, without too much pressure, and wait 10 to 15 seconds to see if you get a good pulse signal every time the heart beats.

### Small Animal Wrap Sensor

This sensor can be used at the base of the tail on some small animals. The diodes must be opposite of each other and applied to skin that is not overly pigmented or covered with hair. Do not wrap the sensor too tightly.

\*Possible sensor sites as reported by veterinary professionals.