

# Change in Interpretation Criteria on Nova StatStrip Lactate Point-of-Care Instrument

Issued 2021-04-23



<b>To:</b>	NH Physicians
<b>cc:</b>	Dr. Victor Meneghetti    NI Laboratory Medical Director Dr. Kamran Azar        NH Laboratory Medical Lead Lisette Vienneau        Director of Diagnostic Services
<b>From:</b>	Diagnostic Services
<b>Re:</b>	Change in Interpretation Criteria on Nova StatStrip Lactate Point-of-Care Instrument

## **Background**

The Nova Statstrip (NSS) Lactate meter has been in use in NH since September 2020. It is used in the maternity wards at UHNBC and Ft. St. John Hospital to perform fetal scalp lactate measurements. Since implementation, there has been provincially noted fluctuations in both the bias and precision of the NSS Lactate meter.

## **Issues:**

**Bias:** The current bias, relative to the main chemistry analyzer, is approximately -0.5 mmol/L for samples with a lactate concentration of 4-5 mmol/L. At the time of implementation in NH, the bias was estimated to be -0.2 mmol/L. This was reflected in interpretation ranges in the standard operating procedures.

**Precision:** The current precision of the meter is estimated to be a standard deviation of 0.5 mmol/L (10%) at a lactate level of 5 mmol/L.

## **Action**

PHSA is recommending the previous interpretation ranges be adjusted to accommodate the fluctuating change in the NSS Lactate measurement bias, as well as the relatively high imprecision error of a given measurement. Specifically, interpretations should be adjusted as per Table 1:

Table1. Interpretation of FSL measurements (mmol/L) performed by Nova StatStrip Lactate Meter

Year	Reassuring Range	Indeterminate Range	High Risk Range
2020	<4.2	4.2-4.8	>4.8
2021 and forward	<3.0	3.0-4.5	>4.5