



**CLINICAL CHEMISTRY AND IMMUNOLOGY MEMORANDUM**

**DATE:** March 3, 2015

**TO:** Emergency Room and Critical Care Physicians, Clinical Educators and Clinical Managers at SJH and HHS

**FROM:** Tony Chetty, Discipline Director Clinical Chemistry and Immunology, HRLMP

**RE:** REVISED VERSION: **CHANGE IN BLOOD GAS ORDER SETS FOR CRITICALLY ILL PATIENTS**

As part of our continuous quality improvement processes, we have noticed discrepancies between the Hb reported off the blood gas analyzer and the Core Lab Haematology instrument. Until this issue is resolved, effective March 2, 2015, Hb will no longer be reported on the blood gas order set. The other test panels will still be available.

Test	Test Specific Orders	Order Codes for Panels				Critical Values (Adults)
		ABG	CRIT ABG	VBG	CRIT VBG	
Glucose Random	√		√		√	≤2.5 mmol/L ≥25 mmol/L
Sodium			√		√	≤120 mmol/L ≥160 mmol/L
Potassium			√		√	≤2.5 mmol/L ≥6.5 mmol/L
Chloride			√		√	-
Lactate	√		√		√	≥4.0 mmol/L
Hydrogen Ion		√	√	√	√	nmol/L
pH		√	√	√	√	≤7.00 ≥7.70
PCO2		√	√	√	√	≤35 mmHg*
PO2		√	√	√	√	-
Bicarbonate (Calc)		√	√	√	√	≤10 mmol/L
Base Excess		√	√	√	√	-
O2 Sat Measured		√	√	√	√	-
Ion Calcium	√					≤0.6

\* Denotes arterial blood

Please note, potassium values measured on the whole blood balanced heparin syringe have a **slight negative bias (about 5%)** compared to plasma potassium values measured from a lithium heparin Vacutainer.

If you have any questions, please contact Dr. Tony Chetty at chetty@hhsc.ca or Dr. Cynthia Balion at balion@hhsc.ca.