



**DATE:** May 12, 2014

**TO:** Emergency Room and Critical Care Physicians at SJH and HHS

**CC:** Ms. I. Hayward, Ms. L. Gauthier, Ms. K. Prine, Ms. J. Barrett, Ms. A. MacDonald, Ms. C. Gosse, Ms. C. McCallum, Dr. R. McLean, Dr. H. Fuller

**FROM:** Dr. Tony Chetty, Discipline Director for Clinical Chemistry and Immunology

**RE:** **NEW BLOOD GAS ORDER SETS FOR CRITICALLY ILL PATIENTS**

The laboratory is offering two new order codes within the blood gas panel for use in critically ill patients. These new orders codes, labelled CRITABG and CRITVBG, offer a complete panel of tests with a faster turn-around time. In an effort to maintain the integrity for their use and the decreased turn-around time associated with them, **please restrict the use of these new test panels to critically ill patients.** These new order codes will become available on May 27, 2014.

Test	Test Specific Orders	Order Codes for Panels				Critical Values (Adults)
		ABG	CRITABG	VBG	CRITVBG	
Hemoglobin			✓		✓	≤ 60 g/L ≥ 200 g/L
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](mailto:chetty@hhsc.ca) or Dr. Cynthia Balion at [balion@hhsc.ca](mailto:balion@hhsc.ca).