

Date: December 22, 2011
To: Physicians and Nursing Staff, Grimshaw Berwyn Health Centre
From: AHS Laboratory Services
Re: New Reference Ranges

PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

Key Messages:

- Effective January 9, 2012, the reference ranges for sodium, potassium, chloride, total CO₂ (TCO₂), creatinine and glucose will be adjusted as the result of the implementation of a new chemistry analyzer.

Why this is important:

Using the correct reference range is required for effective diagnosis and treatment of patients. The reference range information will be indicated on the report with the patient sample value.

Action Required: Please refer to the following ranges for reference and critical values:

Test	Age and gender considerations	Reference Range	Critical Range
Sodium		133 – 146 mmol/L	Less than 125 mmol/L Greater than 155 mmol/L
Potassium,	less than 28 days old	3.7 – 6.0 mmol/L	Less than 3.0 mmol/L Greater than 6.4 mmol/L
	greater than 28 days old	3.3 – 5.1 mmol/L	Less than 3.0 mmol/L Greater than 5.9 mmol/L
Chloride		96 – 107 mmol/L	
TCO ₂	less than or equal to 1 year old	17 – 30 mmol/L	
	greater than or equal to 2 years old	23 – 31 mmol/L	
Creatinine	greater than or equal to 18 years old (male)	45 – 125 umol/L	Equal to or greater than 300 umol/L
	greater than or equal to 18 years old (female)	40 – 115 umol/L	
	10 – 17 years old	40 – 100 umol/L	
	2 – 9 years old	25 – 90 umol/L	
	3 months – 1 year old	10 – 50 umol/L	
	less than or equal to 2 months old	15 – 30 umol/L	
Glucose	Less than 29 days old, fasting	2.5-5.5 mmol/L	Less than 2.0 mmol/L Greater than 22.0 mmol/L
	Less than 29 days old, random	2.5-11.1 mmol/L	
	Equal to or greater than 29 days old, fasting	3.6-6.0 mmol/L	Less than 2.6 mmol/L Greater than 25.0 mmol/L
	Equal to or greater than 29 days old, random	3.3-11.0 mmol/L	

Inquiries and feedback may be directed to:

Dr. Afshin Salarieh Deputy Zone Clinical Department Head, North Zone at 780- 538-7350

This bulletin has been reviewed and approved by

Dr. Afshin Salarieh, Deputy Zone Clinical Department Head, North Zone