

Date: August 28, 2015

To: South Zone West: Physicians, Nurses and Laboratories

From: AHS Laboratory Services – South Zone West

Re: Creatinine – Conversion to “IDMS” Standardization and Revised Reference Intervals

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Key Messages:

- Effective **Sept 1, 2015**, Chinook Regional Hospital Laboratory will implement a new method for Creatinine testing.
- The new method aligns Creatinine results with the internally recognized reference method, isotope dilution mass spectrometry (IDMS).
- The estimated glomerular filtration (eGFR) results will remain similar to current values, as the “IDMS” version of the eGFR calculation will be implemented simultaneously.
- Other South Zone West sites (Cardston, Crowsnest Pass, Fort Macleod, Pincher Creek, Raymond and Taber) currently use an IDMS traceable creatinine method and the “IDMS” version of the eGFR calculation.
- Reference intervals will be adjusted for all sites in South Zone West performing Creatinine IDMS testing (Chinook Regional Hospital, Cardston, Crowsnest Pass, Fort Macleod, Milk River, Pincher Creek, Raymond and Taber). The revisions reflect the change to “IDMS” creatinine and provide better alignment with other laboratories in Alberta.
- The revised reference intervals are as follows:

Serum Creatinine:

Age (years)	Male (µmol/L)	Female (µmol/L)
0 - <2	10 - 60	10 - 60
2 - <6	20 - 60	20 - 60
6 - <13	30 - 70	30 - 70
13 - <15	40 - 85	40 - 85
15 - 150	50 - 115	50 - 105

Urine (24h) Creatinine:

Age (years)	Male (mmol/d)	Female (mmol/d)
18 - 150	7.0 - 20.0	5.0 - 16.0

Why this is important:

- A minimal decrease in patient results will occur with the switch to the new method. This is reflected in the new reference intervals.
- This new method will provide improved correlation of Creatinine results obtained by the different analyzers in South Zone West.

Inquiries and feedback may be directed to:

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This bulletin has been reviewed and approved by:

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