



**Date:** June 15, 2020  
**To:** South Zone Physicians, Nursing Staff, Pharmacy Staff, and Laboratory Staff  
**From:** Clinical Biochemistry, South Sector, Alberta Precision Laboratories (APL)  
**Re:** Changes to Reference Intervals of Magnesium and Urea

**PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE**

**Key Message:**

- Effective **June 16, 2020**, reference intervals for Urea and Magnesium will be updated to reflect the new provincial standardized reference intervals:

| Analyte   | Age           | Reference Interval | Units  | Gender  | Critical Value(s) |
|-----------|---------------|--------------------|--------|---------|-------------------|
| Magnesium | 0 – 150 years | 0.7 – 1.00         | mmol/L | M, F, U | < 0.40 & >1.90    |
| Urea      | < 2 years     | 1.0 – 7.5          | mmol/L | M, F, U | N/A               |
|           | 2 – 17 years  | 2.0 – 7.0          | mmol/L | M, F, U | N/A               |
|           | 18 – 55 years | 2.0 – 7.0          | mmol/L | F       | N/A               |
|           | 18 – 55 years | 3.0 – 8.0          | mmol/L | M, U    | N/A               |
|           | > 55 years    | 3.0 – 8.0          | mmol/L | F       | N/A               |
|           | > 55 years    | 3.0 – 9.0          | mmol/L | M, U    | N/A               |

- These changes will be reflected in the Lab Information System (LIS).

**Why this is Important:**

- New provincial reference intervals are evidence-based and have been developed based on the statistics obtained from the Albertan population.

**Action Required:**

- Please be aware of the changes in reference intervals.

**Inquiries and feedback may be directed to:**

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- Dr. Dennis Orton, Clinical Biochemist, APL South Sector - Chinook Regional Hospital, 403-770-3219, [dennis.orton@aplabs.ca](mailto:dennis.orton@aplabs.ca)

**This bulletin has been reviewed and approved by:**

- Dr. Michael Greeff, Regional Laboratory Medicine Site Chief, Chinook Regional Hospital
- Dr. Julio Silva, regional Laboratory Medicine Site Chief, Medicine Hat Regional Hospital
- Dr. Hossein Sadrzadeh, Section Chief, Clinical Biochemistry, APL South Sector
- Dr. Leland Baskin, Associate Medical Director, APL South Sector