

**Date:** December 1, 2014  
**To:** North Zone – Former Peace Country Health Region Laboratories, Physicians, and Nursing Unit, Managers, excluding QEII  
**From:** AHS Laboratory Services  
**Re:** Ammonia Testing

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### Key Messages:

- Effective December 4, 2014 ammonia testing will be implemented in Peace River. This will allow for all ammonia orders in the former peace region to be tested at either Peace River or QEII Hospital Laboratory.
- Ammonia measurements are used in the diagnosis and treatment of severe liver disorders, notably in patients with suspected hepatic encephalopathy. An ammonia level may also be ordered to help detect and evaluate the severity of a urea cycle defect.
- The optimal specimen is a fresh sample collected in a lithium heparin tube, transported on ice, centrifuged and run within 30 minutes.
- Samples collected at non-performing sites must be spun, separated and frozen at -20°C for a minimum of one hour before sending to a performing site.
- Samples collected at the non-performing sites will have the following comment attached to all ammonia results: *"This specimen was frozen for transport to performing site. Ammonia results may be higher than expected and should be interpreted with caution"*.
- Reference Ranges are as indicated below

Age	Reference Range	Critical Value
0 days – 1 month	55 - 90 µmol/L	110 µmol/L
≥ 1 month	25 - 55 µmol/L	110 µmol/L
≥ 15 years	11 - 32 µmol/L	>15 years 110 µmol/L >16 years 200 µmol/L

### Why this is important:

- This will allow for easier access and an improved turnaround time for ammonia results.

### Action Required:

- No action required

### Inquiries and feedback may be directed to:

Dr. Mireille Kattar, Regional Pathologist at 780-407-3373 or [Mireille.Kattar@albertahealthservices.ca](mailto:Mireille.Kattar@albertahealthservices.ca)

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

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