

DATE:	2022 January 24
TO:	All Zones: Physicians, Nursing Managers, Laboratory Directors and Managers
FROM:	Clinical Biochemistry, South Sector, APL
RE:	Repatriation of Vitamins B1 and B6 Testing to Calgary

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Key Message

- Effective January 25, 2022, vitamins B1 and B6 will be repatriated to APL and run at the Pharmacokinetics Laboratory in the Tom Baker Cancer Centre (TBCC) in Calgary. These tests were previously sent out of province.
- Expected turn-around time is within ten business days from specimen receipt
- APL test directory will be updated

Why this is important

- Repatriation of vitamins B1 and B6 will provide a more clinically relevant assay with faster turnaround times and cost savings
- Vitamin B1 levels will continue to be reported in whole blood as the active metabolite Thiamine diphosphate (TDP)
- Vitamin B6 sample type will change from plasma to whole blood and reported as Pyridoxal-5'-phosphate (PLP)
- Erythrocyte stores of the active form of TDP and PLP are more indicative of clinical status and less prone to influence from recent dietary intake

Analyte	Reference Interval	Note
Vitamin B1	66.5 – 200.0 nmol/L	* Continue reporting in whole blood
Vitamin B6	35.0 – 110.0 nmol/L	* Changed to reporting from whole blood

Action Required

- Request Vitamin B1, Vitamin B6 on the General Laboratory requisition or enter the test mnemonic VIT B1, VIT B6 if ordering electronically
- Both tests can be ordered at the same time or separately (4 mL K₂EDTA tube)
- Vitamins B1 and B6 test results will now be available in Millennium, ConnectCare, Netcare and physician office systems

Inquiries and feedback may be directed to

- Bill Kangaroo, Lead, Pharmacokinetics Lab, APL South Sector
- Dr. Jessica Boyd, Clinical Biochemist, APL South Sector
- Dr. Dennis Orton, Clinical Biochemist, APL South Sector

This bulletin has been reviewed and approved by

- Dr. Hossein Sadrzadeh, Section Chief, Clinical Biochemistry, APL South Sector
- Dr. Paul Klonowski, Associate Medical Director, APL South Sector