Alberta Public Laboratories (APL)

Laboratory Bulletin

Date: **March 11, 2019**
To: **All Zones**
From: **Alberta Public Laboratories (APL) – Genetics and Genomics**
Re: **Expansion of Newborn Metabolic Screening (NMS) Panel**

PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

Key Message:

- As mandated by Alberta Health, the Newborn Metabolic Screening Panel will be expanded to include four new conditions for infants born in Alberta.
- These new conditions are: classic galactosemia (GALT), tyrosinemia type 1 (TYR1), sickle cell disease (SCD) and severe combined immunodeficiency (SCID).
- Screening for GALT, TYR1 and SCD will begin April 01, 2019 and screening for SCID will begin May 6, 2019.

Why this is important:

- This will allow better health outcomes for Albertans with the screened conditions, and access to newborn screening for all Albertan newborns that is on par with other programs across Canada.

Action Required:

In order to minimize false positive and false negative screen results:

- For preterm infants, ensure you provide gestational age on the newborn screen requisition.
- For infants requiring blood transfusion, collect the newborn screen before blood transfusion when possible. Indicate on the newborn screen requisition if the blood spot collection occurred before or after transfusion and the date of last transfusion.
- For all infants, indicate any feed types occurring 12h before collection on the newborn screen requisition. (i.e. breastfeeding, milk-based formula, total parenteral nutrition or special formulas (non-lactose or soy formula).

Specimen Collection/Transportation Requirements:

- The Newborn Metabolic Screening Laboratory is accepting both old and new requisitions for the month of March. Starting April 01, 2019, only new requisitions will be accepted.
- Staff to be aware of requisition ordering information and new specimen collection requirements (e.g.: order of collection, 5th collection spot, fold-over cover)
- Quality blood spot collection and timely transport of the newborn screen requisition is crucial. The new screening markers have limited stability and delay in transport may affect the integrity of the blood spot prompting sample recollection.

Reporting and Follow Up:

- Primary care providers and specialists will be notified by telephone of critical newborn screen results for GALT, TYR1, SCD and SCID.
- Primary care providers will receive a letter and educational resources for sickle cell trait screen results. Specialist referral is only required if active clinical symptoms are present.

Additional Information:

- Please visit the NMS Program's Resource page on Insite to access Staff Education, Provider Information and other resources at https://www.albertahealthservices.ca/info/Page9014.aspx

Inquiries and feedback may be directed to:

Genetic Counsellors (UAH) at 780-407-7907

This bulletin has been reviewed and approved by:

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