

Date: February 19, 2014

To: Central Zone – Rural Acute Care Hospitals (excluding Red Deer Regional Hospital Centre)
Physicians, Nurse Managers, Educators and Practitioners, and Laboratory Staff

From: AHS Laboratory Services – Central Zone

Re: Capillary Blood Gas Testing: Collection and Analysis

PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

Key Messages:

- Laboratory staff in Central Zone do not collect and/or perform capillary blood gas analysis. Performing these collections without adequate training could adversely affect sample integrity and cause erroneous test results, putting the patient at risk.
- Supplies for capillary blood gas collection are not stocked in Central Zone rural laboratories.
- Capillary blood gas testing is to be performed only by staff that are trained to collect/analyze these samples and who regularly perform these collections.

Action Required:

- If there is a request for a capillary blood gas result prior to patient transport, for example by NICU or STARS Air Ambulance, the local physician or STARS Air Ambulance staff must adhere to the following if they will collect and analyze the sample:
 - **Collection from the patient**
 - The individual is trained to collect capillary blood gas samples.
 - The individual provides the required supplies for the collection, e.g. blood gas capillary collection tube.
 - **Analysis using the laboratory i-STAT**
 - The individual is trained to use the i-STAT with a capillary collection tube (note: laboratory staff are not trained to do this).
 - The laboratory can provide the G3 cartridge and the i-STAT analyzer.
 - Assurance of appropriate training is the responsibility of the individual performing the collection/analysis and the individual's supervisor/department lead.

Inquiries and feedback may be directed to:

- Dr. Allison Venner, Clinical Biochemist, Central Zone, at 403-406-5633 or email: allison.venner@albertahealthservices.ca
- Pathologist On-Call, Central Zone, at 403-304-1351 if assistance is required "off hours".

This bulletin has been reviewed and approved by:

Dr. James Wesenberg, AHS Provincial Medical / Scientific Director, Laboratory Services