

Date: July 13, 2012

To: Central, North and South Zones: Physicians, Nurses and Laboratories

From: AHS Laboratory Services

Re: ***** Notice of Delayed Implementation*****
Definition & Timing for Fasting Glucose Test; Glucose Tolerance Test Decision Cut-off Point

PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

Key Messages:

The original implementation date of July 11, 2012 for North, Central & South Zones for the following changes to fasting for glucose tests and to glucose tolerance tests could not be met, due to the complexity of the changes required. Upon completion of the required building/testing of the Lab Information System, a new date will be issued.

Fasting for Glucose Tests

- Fasting is defined as nothing to eat, chew, or drink other than small amounts of water. Prescription medication is permitted.
- The minimum fasting time for glucose is 8 hours (Canadian Diabetes Guidelines, 2008).

Glucose Tolerance Test – All types

- If the fasting glucose concentration is greater than 7.8 mmol/L, the tolerance test will not continue. Laboratory procedures for patient reporting will be updated to reflect this change.

Rationale:

The Canadian Diabetes Association guideline (2008) states that a fasting glucose of 7.0 mmol/L or greater is diagnostic of diabetes mellitus. Glucose meters are used by many laboratory collection sites, as they provide a rapid fasting glucose result that is reviewed before administering the glucose drink for a glucose tolerance test. Glucose meters have known bias and imprecision challenges (up to 25%), therefore utilizing a threshold concentration of 7.0 mmol/L to halt a glucose tolerance test is too restrictive. Accordingly, the Laboratory Services Chemistry Network has recommended that a fasting glucose concentration greater than 7.8 mmol/L obtained by any glucose methodology, including glucose meters, be the standard threshold value in Alberta for discontinuing any glucose tolerance test.

Inquiries and feedback may be directed to:

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This bulletin has been reviewed and approved by:

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