

#### **Leaders in Laboratory Medicine**

# **Laboratory Bulletin**

DATE:	2022 June 27
TO:	All of North Sector and Central Zone Sites that refer samples to Edmonton)
FROM:	Clinical Toxicology, North Sector, Alberta Precision Laboratories (APL)
RE:	Reporting of Methanol, Ethylene Glycol, Isopropanol and Acetone

### PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

# **Key Message**

- Effective June 27/2022 the following changes will be made:
  - Negative (i.e. non-critical) methanol, ethylene glycol, isopropanol and acetone results will no longer be phoned. Critical results will continue to be phoned as per usual processes. As a reminder the following values are considered critical:
    - Methanol ≥ 2 mmol/L
    - Ethylene Glycol ≥ 2 mmol/L
    - Isopropanol ≥ 9 mmol/L
    - Acetone ≥ 7 mmol/L
  - Positive ethylene glycol <u>screening</u> results will no longer be reported. Confirmatory ethylene glycol results will continue to be reported.

## **Background**

- Phoning non-critical results is not consistent with normal laboratory practice and is inefficient both from the perspective of the laboratory and the emergency department.
- The ethylene glycol <u>screening</u> test is a very efficient way to report negative ethylene glycol results (it is sensitive and fast). If the screening test is negative, no further testing is performed, and the result of the screening test is reported.
- The screening test, although sensitive and fast, is not specific and false positive results are possible. Due to the possibility of false positive screening results, all ethylene glycol samples that screen positive are immediately reflexed to confirmatory testing. To avoid potential confusion when the screening test and the confirmatory test do not match (i.e. screening test positive and confirmatory test negative) only the confirmatory test will be reported. It is important to note that the ethylene glycol confirmatory test will still have a turn-around time that is suitable for these STAT requests.

# How this will impact you

- Be aware that for methanol, ethylene glycol, isopropanol and acetone, only results that are critical will be phoned (non-critical results will no longer be phoned).
- Positive ethylene glycol <u>screening</u> results will not be reported. Only the results of the reflexed confirmatory test will be reported.

#### **Action Required**

There is no change to ordering. This change only relates to the reporting of results.



Leaders in Laboratory Medicine

# Inquiries and feedback may be directed to

- Dr. Penny Colbourne, Clinical Toxicologist, University of Alberta Hospital Toxicology Laboratory, 780-407-4729
- Dr. Dylan Thomas, Clinical Biochemist, University of Alberta Hospital Toxicology Laboratory, 780-717-6678

# This bulletin has been reviewed and approved by

- Dr. Kareena Schnabl, Section Chief Biochemistry, North Sector
- Dr. Michael Mengel, Medical Director, North Sector