



Date: June 29, 2020
To: Central Zone, North Sector, Physicians, Laboratory Directors, Managers and Supervisors
From: Clinical Biochemistry, North Sector, Alberta Precision Laboratories (APL)
Re: Changes to Urinalysis Reporting

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Key Message:

- Effective **July 8, 2020**, the following changes will be implemented in urinalysis reporting:
 - For urines with an abnormal color (other than colorless, yellow or amber):
 - Only color and clarity will be reported, all other macroscopic (dipstick) tests will be resultated as *“Unable to interpret due to interfering substance”*.
 - Urine microscopy will be automatically triggered
 - Changes to microscopic element reporting

Microscopic element	Changes to urine microscopy
Mucus	No longer reported on urine microscopy
Epithelial Cells	Non-squamous epithelial cells category has been removed New categories for Epithelial cells: <ul style="list-style-type: none"> • Squamous/Transitional epithelial • Renal Tubular epithelial cells
Sperm	<ul style="list-style-type: none"> • Sperm reported on females less than 16 years of age will be accompanied by the provincial sexual interference comment: <i>“This result needs to be interpreted with other clinical information to determine if investigation by Alberta Children Services is warranted. It is the ordering physician's responsibility to notify regional offices or the Provincial Child Abuse Hotline (1-800-387-5437) if indicated.”</i>
Trichomonas	<ul style="list-style-type: none"> • When present on males and females < 16 years of age the provincial sexual interference comment will be auto appended (same comment listed above for sperm on females < 16 years of age)



- Urinalysis macroscopy (dipstick) is now standardized to report in SI units. Numeric results will now be reported instead of the 1+/2+/3+/4+ reporting scheme previously used in North East Central zone.

Analyte	Old reporting scheme	New reporting scheme	Reference range
Glucose	Negative Trace 1+ 2+ 3+ 4+	Negative 5.5 mmol/L 14 mmol/L 28 mmol/L ≥55 mmol/L ≥55 mmol/L	Negative
Ketones	Negative Trace 1+ 2+ 3+ 4+	Negative 0.5 mmol/L 1.5 mmol/L 3.9 mmol/L 8 mmol/L ≥15.6 mmol/L	Negative
Blood	Negative Trace 1+ 2+ 3+	Negative Trace 25 cells/uL 80 cells/uL 200 cells/uL	Negative
Protein	Negative Trace 1+ 2+ 3+ 4+	Negative Trace 0.3 g/L 1.0 g/L ≥3.0 g/L ≥3.0 g/L	Negative
Leukocytes	Negative Trace 1+ 2+ 3+	Negative 15 cells/uL 70 cells/uL 125 cells/uL 500 cells/uL	Negative

Why this is Important:

- These changes in urinalysis reporting are to standardize laboratory nomenclature, reporting and processes within APL North and South Sectors in preparation for Connect Care implementation.

Action Required:

- Be aware of the changes in urinalysis reporting.

Inquiries and feedback may be directed to:

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This bulletin has been reviewed and approved by:

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