

Pathology and Laboratory Medicine Memorandum

To: NSHA Physicians, Nurse Practitioners, Health Service Directors and Laboratories

From: Program of Pathology and Laboratory Medicine

Date: September 12, 2019

Subject: Urinalysis Standardization of Cancellation, Microscopic Analysis and Result Reporting

New, standardized urinalysis instrumentation is being implemented provincially with staggered go-live dates across zones. Sites within the Central Zone will be the first to go-live October 21st, 2019. Dates for the implementation in Eastern, Western and Northern Zones will follow.

The standardization will result in the following changes:

1. The inability to request microscopic urine examinations as a first line test.

- Urine samples that have positive findings on automated dipstick urinalysis (for blood, protein, leucocyte esterase, turbidity or nitrites) will have microscopic examination reflexed as per current laboratory protocols.
- Samples that are negative for dipstick parameters will no longer be subjected to microscopic examination, even if requested on the requisition.
- Locations that perform their own dipstick analysis (e.g. emergency departments) should discontinue the practice of sending urine samples that are negative for all five of the above parameters to the laboratory as this will result in duplication of the dipstick test, but no microscopic analysis.

Important notes on urinalysis including microscopics:

- Microscopic examination of dipstick negative urine samples are generally unnecessary as they do not yield additional information.
- NSHA currently processes over 300,000 urinalysis samples annually. The vast majority of these have negative findings and are requested as part of a "routine" screen for asymptomatic patients, which is not recommended.
- Indications for urine analysis are ideally as follows:
 - o Patients with symptoms suggestive of a UTI or other urine tract disorder such as: abdominal pain, back pain, frequent or painful urination or evidence of blood in urine.
 - o Monitoring patients with known kidney conditions, diabetes or renal protein loss.
 - Screening of pregnant females or pre-operative patients.
- In the interest of appropriate test utilization we recommend that urinalysis is generally otherwise not requested.



2. Urine samples that are greater than 8 hours from the time of collection will not be processed for urinalysis based on a local stability study on sample integrity.

The benefits of this provincial implementation include:

- Consistent work practices across all labs
- Standardized result reporting for clinicians
- Improved test utilization practices, and reduced duplication

For questions / concerns, please contact:

Central Zone, Dr. Manal Elnenaei, (902) 473-5194

Western Zone, Dr. Brian Jollymore, (902) 679-2657 ext. 1053

Northern Zone, Dr. Robert Boutilier, (902) 893-5554 ext. 42185

Eastern Zone, Dr. Samina Mansoor, (902) 567-7783