

Department of Pathology and Laboratory Medicine Capital District Health Authority Nova Scotia

TITLE: POCT Performing Urine Analysis	Doc #: 19351
Section: \\Management System\PLM\General\PLM Website\Point of	Version: 1.0 Current
Care Testing\Urinalysis\	
Document Owner: Technical Specialist POC Chemistry	Revision Date: 10/23/2013
Final Approval: Dr Bassam Nassar	

Purpose

This procedure provides instructions for performing urine analysis using the Multistix

10sg reagent strip.

Abbreviations

UA = Urinalysis

POC = Point of Care

Materials

Reagents

Multistix 10sg reagent strip for urinalysis, Siemens, 2300A

Reagents preparation: None

Reagents stability and storage: Until expiry date at room temperature.

Supplies

Sterile urine container

Equipment

Timing device that measures minutes

Sample

Sample type	Amount required	Transport and Storage	Stability
No preservatives random urine	10 mL	Room temperature	2-4 hours

Limitations: Ideally urine should be examined within 2-4 hours after collection. Some chemical and microscopic components begin to deteriorate after 4 hours. Specimens should be at room temperature before testing.

Page 1 of 4



Note:

- The first morning urine is the preferred sample.
- Skin cleansers should not be used prior to collection as they may interfere with analysis.

Special Safety Precautions

Refer to CDHA Safety Manual for standard safety procedures.

Maintenance

Complete QA Form

Step	Action
1.1	Record lot number of reagent strips in use.
1.2	Record QC results. To be done monthly or when a new lot number of
	strips are to be used.
1.3	Record quality issues as required.
1.4	Retain all QA forms in a binder available for review

Quality Control

Control	Level	Stability	Frequency	Preparation (y/n)
Liquichek urinalysis control, Bilevel	1, 2	Up to expiry date unopened at 2-8°C	Monthly and with each new lot number	None
minipak, Biorad, 435x		30 days once opened at 2- 25°C		

Control preparation: Mix well and bring to room temperature before use.

Follow 2.0 Analyzing Urine Sample for processing Quality Control Material.



TITLE: POCT Performing Urine Analysis Version: 1.0 Current

Procedure

1.0 Collect Sample

	noot oumpro		
Step	Action		
1.1	Label sterile urine container with:		
	Patient name,		
	 Patient MRN and/or HCN number 		
	Time and date of collection		
1.2	Give labeled container to patient		
1.3	Instruct patient on urine collection guidelines		
	Note: Skin cleansers should not be used prior to collection as they		
	may interfere with analysis		
1.4	Obtain sample from patient and move to testing area		

2.0 Analyzing urine sample

01	Antino
Step	Action
2.1	Attach label with patient's name and/or medical record number on
	the POC Urinalysis Form
2.2	Dip Multistix strip in the labeled urine container.
	Note: Immerse all pads.
2.3	Remove the strip from container by slowly run the edge of the strip
	against the side of the container to remove excess urine
	Note: Do not remove the excess against a paper towel as this may
	cause inaccurate results by one reagent pad color contaminating
	another reagent pad
2.4	Set timer for 60 seconds and immediately read results using color
	chart provided on side of strip container
	Note: Results must be read after 1 minute and no more than 3
	minutes after removing strip from sample.

3.0 Record results

			
Step	Action		
3.1	Record all results on the POC Urinalysis Form.		
	Note : Complete all required area on form.		

Result Interpretation

If urine is bloody or intensely coloured all tests except colour, appearance and specific gravity are INVALID.

If bilirubin indicates "Moderate" or "Large" it is recommended that sample be sent to Laboratory for analysis.



Ex	pected
Val	ues

Analyte	Normal result
Colour	Straw
Appearance	Clear
Leukocyte	Negative
Nitrite	Negative
рН	Diet dependant
Specific gravity	<1.005 to > 1.030
Protein	Negative to trace
Glucose	Negative
Ketone	Negative
Urobilinogen	3.2 to 16µmol/L
Bilirubin	Negative
Blood	Negative

Refer to package insert for urine chemistry sensitivity.

Limitations

Refer to Multistix 10sg reagent strip package insert.

Principle

Refer to Multistix 10sg reagent strip package insert.

Related Procedures and Documents

Document Name	Document #	Location
Laboratory Testing Guidelines	CC 085-019	Intranet
[Paralink: <clinitek log="" qa="" status="">]</clinitek>	27982	Paradigm

Reference

Siemens Multistix 10sg reagent strip package insert.