

**CAPT_URI_0200JA2 Urine Specimen Collection Requirements and Reference Ranges**

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Urine Specimen Collection Requirements and Reference Ranges

CAPT_URI_0200JA2** Urinalysis, Dipstick Only***Mnemonic**

U DIPSTICK

Synonym

URINE TEST STRIP - URINALYSIS, DIP STICK ONLY - UADIP

GuidelinesPlease refer to **Patient Instructions for Collecting a Mid-Stream Urine Sample**https://point-of-care.elsevierperformancemanager.com/skills/626/quick-sheet?skillId=GN_43_1&virtualname=phsa_canada**Patient Preparation**

Males: Discard the first 25 mL of urine then collect without stopping the stream. Females: Spread labia while urinating.

Collect

Sterile wide-mouthed container. The first morning urine is the preferred specimen; however any fresh random urine is acceptable.

Handling

Deliver to the lab ASAP or refrigerate immediately if specimen will not arrive to laboratory within 1 hour.

Preferred Volume: 15 mL**Minimum Volume:** 12 mL

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Documents used outside of OMNI are uncontrolled.

Transport

Refrigerated

Rejection Criteria

Frozen specimen, specimen collected with preservatives, urine collected in a diaper or other absorbent material, and non-sterile containers

Stability

Ambient: 2 hours;

Refrigerated: 12 hours

Reference Values

Specific Gravity:	<1.030
pH:	5.0-8.0
Leukocyte Esterase:	Negative
Nitrite:	Negative
Protein:	Negative
Glucose:	Negative
Ketones:	Negative
Bilirubin:	Negative
Blood:	Negative

Normal Results

Ranges for normal values vary among different labs and hospitals. You should always check with your health care provider after having lab work or other tests done to discuss whether your values are considered within normal limits.

- Appearance: clear.
- Color: amber yellow.
- Odor: aromatic.
- pH: 4.6–8.0 (average, 6.0).
- Protein:
 - 0–8 mg/dL.

- 50–80 mg/24 hr (at rest).
 - Less than 250 mg/24 hr (during exercise).
- Specific gravity:
 - Adult: 1.005–1.030 (usually, 1.010–1.025).
 - Elderly: values decrease with age.
 - Newborn: 1.001–1.020.
- Leukocyte esterase: negative.
- Nitrites: none.
- Ketones: none.
- Bilirubin: none.
- Urobilinogen: 0.01–1 Ehrlich unit/mL.
- Crystals: none.
- Casts: none.
- Glucose:
 - Fresh specimen: none.
 - 24-hour specimen: 50–300 mg/24 hr or 0.3–1.7 mmol/day (SI units).
- White blood cells (WBCs): 0–4 per low-power field.
- WBC casts: none.
- Red blood cells (RBCs): Less than or equal to 2.
- RBC casts: none.
- Epithelial cells: Few or 0–4 per low-power field.
- Bacteria: none.
- Yeast: none.

Meaning of Abnormal Results

Many conditions can cause abnormal UA results:

- Cloudy urine may be a sign of a UTI.
- Blood in your urine may be a sign of kidney disease, UTI, or other medical conditions.
- White blood cells may be a sign of UTI.
- Crystals may be a sign of a kidney stone or other kidney disease.
- High pH may mean you have a kidney stone, UTI, or kidney disease.
- Protein may be a sign of kidney disease, high blood pressure in pregnancy (*toxemia*), or other medical conditions.
- Glucose may be a sign of diabetes.
- Urobilinogen may be a sign of liver disease.

REFERENCE:

- Elsevier Performance Manager Clinical Skills https://point-of-care.elsevierperformancemanager.com/skills/431/quick-sheet?skillId=GN_43_4&virtualname=phsa_canada