

**Reporting Title:** Cortisol/Cortisone, Free, U  
**Performing Location:** Rochester

**Necessary Information:**  
24-Hour volume (in milliliters) is required.

**Specimen Requirements:**  
**Supplies:** Urine Tubes, 10-mL (T068)  
**Submission Container/Tube:** Plastic, urine tube (T068)  
**Specimen Volume:** 5 mL  
**Collection Instructions:**

- 1. Collect urine for 24 hours.
- 2. Add 10 g of boric acid as preservative at start of collection.

**Additional Information:** See [Urine Preservatives-Collection and Transportation for 24-Hour Urine Specimens](#) for multiple collections.

**Urine Preservative Collection Options:**

**Note:** The addition of preservative or application of temperature controls **must occur at the start of the collection.**

Ambient	No
Refrigerate	OK
Frozen	OK
50% Acetic Acid	OK
Boric Acid	Preferred
Diazolidinyl Urea	No
6M Hydrochloric Acid	No
6M Nitric Acid	No
Sodium Carbonate	No
Thymol	No
Toluene	No

Specimen Type	Temperature	Time	Special Container
Urine	Refrigerated (preferred)	14 days	
	Frozen	28 days	
	Ambient	72 hours	

**Ask at Order Entry (AOE) Questions:**

Test ID	Question ID	Description	Type	Reportable
COCOU	TM93	Collection Duration	Plain Text	Yes
COCOU	VL47	Urine Volume	Plain Text	Yes

**Result Codes:**

Result ID	Reporting Name	Type	Unit	LOINC®
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8546	Cortisol, U	Alphanumeric	mcg/24 h	14158-0
10327	Cortisone, U	Alphanumeric	mcg/24 h	14044-2
TM93	Collection Duration	Alphanumeric		13362-9
VL47	Urine Volume	Alphanumeric		3167-4

LOINC® and CPT codes are provided by the performing laboratory.

Supplemental Report:

No

CPT Code Information:

82530-Cortisol; free  
82542

Reference Values:

CORTISOL

0-2 years: not established  
3-8 years: 1.4-20 mcg/24 hours  
9-12 years: 2.6-37 mcg/24 hours  
13-17 years: 4.0-56 mcg/24 hours  
> or =18 years: 3.5-45 mcg/24 hours

CORTISONE

0-2 years: not established  
3-8 years: 5.5-41 mcg/24 hours  
9-12 years: 9.9-73 mcg/24 hours  
13-17 years: 15-108 mcg/24 hours  
> or =18 years: 17-129 mcg/24 hours

Use the factors below to convert each analyte from mcg/24 hours to nmol/24 hours:

Conversion factors

Cortisol:  $\text{mcg/24 hours} \times 2.76 = \text{nmol/24 hours}$  (molecular weight=362.5)  
Cortisone:  $\text{mcg/24 hours} \times 2.78 = \text{nmol/24 hours}$  (molecular weight=360)

For SI unit Reference Values, see <https://www.mayocliniclabs.com/order-tests/si-unit-conversion.html>