

Reporting Title: Metanephrines with 3-MT, 24h, U
Performing Location: Rochester

Ordering Guidance:
[Tricyclic antidepressants, labetalol, and sotalol medications may elevate levels of metanephrines producing results that cannot be interpreted. If clinically feasible, it is optimal to discontinue these medications at least 1 week before collection. For advice on assessing the risk of removing patients from these medications and alternatives, consider consultation with a specialist in endocrinology or hypertension.](#)

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

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

- Complete 24-hour urine collections are preferred, especially for patients with episodic hypertension; ideally the collection should begin at the onset of a "spell."
- Collect urine for 24 hours.
- Add 10 g (pediatric: 3 g) of boric acid or 25 mL (pediatric: 15 mL) of 50% acetic acid as preservative at start of collection.

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

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

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

Ask at Order Entry (AOE) Questions:

Test ID	Question ID	Description	Type	Reportable
METAF	TM50	Collection Duration	Plain Text	Yes
METAF	TM50	Collection Duration	Plain Text	Yes
METAF	VL48	Urine Volume	Plain Text	Yes
METAF	VL48	Urine Volume	Plain Text	Yes

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
8552	Metanephrine, U	Alphanumeric	mcg/24 h	19049-6
21545	Normetanephrine, U	Alphanumeric	mcg/24 h	2671-6
83006	Total Metanephrines, U	Alphanumeric	mcg/24 h	2609-6
TM50	Collection Duration	Alphanumeric		13362-9
VL48	Urine Volume	Alphanumeric		3167-4
VL48	Urine Volume	Alphanumeric		3167-4
2434	Comment	Alphanumeric		48767-8
609422	3-Methoxytyramine, U	Alphanumeric	mcg/24 h	32618-1

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

Supplemental Report:

No

Components:

Test Id	Reporting Name	CPT Units	CPT Code	Always Performed	Available Separately
3MT1	3-Methoxytyramine, U	1	82542	Yes	Yes, (Order 3MT)
METAF	Metanephrines, Fractionated, 24h, U	1	83835	Yes	Yes

CPT Code Information:

82542

83835

Reference Values:

3-Methoxytyramine:

Males: < or =306 mcg/24 hours

Females: < or =242 mcg/24 hours

METANEPHRINE

Males

Normotensives

3-8 years: 29-92 mcg/24 hours

9-12 years: 59-188 mcg/24 hours

13-17 years: 69-221 mcg/24 hours

> or =18 years: 44-261 mcg/24 hours

Reference values have not been established for patients that are <36 months of age.

Hypertensives: <400 mcg/24 hours

Females

Normotensives

3-8 years: 18-144 mcg/24 hours

9-12 years: 43-122 mcg/24 hours

13-17 years: 33-185 mcg/24 hours

> or =18 years: 30-180 mcg/24 hours

Reference values have not been established for patients that are <36 months of age.

Hypertensives: <400 mcg/24 hours

NORMETANEPHRINE

Males

Normotensives

3-8 years: 34-169 mcg/24 hours

9-12 years: 84-422 mcg/24 hours

13-17 years: 91-456 mcg/24 hours

18-29 years: 103-390 mcg/24 hours

30-39 years: 111-419 mcg/24 hours

40-49 years: 119-451 mcg/24 hours

50-59 years: 128-484 mcg/24 hours

60-69 years: 138-521 mcg/24 hours

> or =70 years: 148-560 mcg/24 hours

Reference values have not been established for patients that are <36 months of age.

Hypertensives: <900 mcg/24 hours

Females

Normotensives

3-8 years: 29-145 mcg/24 hours

9-12 years: 55-277 mcg/24 hours

13-17 years: 57-286 mcg/24 hours

18-29 years: 103-390 mcg/24 hours

30-39 years: 111-419 mcg/24 hours

40-49 years: 119-451 mcg/24 hours

50-59 years: 128-484 mcg/24 hours

60-69 years: 138-521 mcg/24 hours

> or =70 years: 148-560 mcg/24 hours

Reference values have not been established for patients that are <36 months of age.

Hypertensives: <900 mcg/24 hours

TOTAL METANEPHRINE**Males****Normotensives**

3-8 years: 47-223 mcg/24 hours

9-12 years: 201-528 mcg/24 hours

13-17 years: 120-603 mcg/24 hours

18-29 years: 190-583 mcg/24 hours

30-39 years: 200-614 mcg/24 hours

40-49 years: 211-646 mcg/24 hours

50-59 years: 222-680 mcg/24 hours

60-69 years: 233-716 mcg/24 hours

> or =70 years: 246-753 mcg/24 hours

Reference values have not been established for patients that are <36 months of age.

Hypertensives: <1300 mcg/24 hours

Females**Normotensives**

3-8 years: 57-210 mcg/24 hours

9-12 years: 107-394 mcg/24 hours

13-17 years: 113-414 mcg/24 hours

18-29 years: 142-510 mcg/24 hours

30-39 years: 149-535 mcg/24 hours

40-49 years: 156-561 mcg/24 hours

50-59 years: 164-588 mcg/24 hours

60-69 years: 171-616 mcg/24 hours

> or =70 years: 180-646 mcg/24 hours

Reference values have not been established for patients that are <36 months of age.

Hypertensives: <1300 mcg/24 hours

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