

Testosterone, Total and Bioavailable, Serum

Test ID: TTBS

Explanation:

Due to assay issues, bioavailable testosterone will be test down on the effective date. All MCL specimens will be sent to the referral test below. An update will be provided when normal testing resumes.

Note:

The MCL account-specific fee for TTBS will be honored until 12/31/2024.

Recommended Alternative Test:

Testosterone, Free and Weakly Bound, With Total Testosterone, LC/MS-MS

Test ID: FFTST

Methodology:

Ammonium sulfate precipitation; liquid chromatography/tandem mass spectrometry (LC/MS-MS)

Reference Values:

CHILDREN

	Male Range (ng/dL)	Female Range (ng/dL)
Premature Infants		
26 to 28 Weeks, Day 4	59.0-125.0	5.0-16.0
31 to 35 Weeks, Day 4	37.0-198.0	5.0-22.0

Full-term Infants

Newborns 75.0-400.0 20.0-64.0

Males 1 to 7 Months

Levels decrease rapidly the first week to 20.0-50.0 ng/dL, then increase to 60.0-400.0 ng/dL (mean=190.0) between 20-60 days. Levels then decline to prepubertal range of <2.5-10.0 by seven months.

Females 1 to 7 Months

Levels decrease during the first month to <10.0 ng/dL and remain there until puberty.

Prepubertal Children	1 to 10 Years	1 to 9 Years
	<2.5-10.0	<2.5-10.0

PUBERTY

Tanner Stage	Age (Years)	Range (ng/dL)	Mean (ng/dL)
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Males

1	<9.8	<2.5-10.0	4.9
2	9.8-14.5	18.0-150.0	42.0
3	10.7-15.4	100.0-320.0	190.0
4	11.8-16.2	200.0-620.0	372.0
5	12.8-17.3	350.0-970.0	546.0

Tanner Stage	Age (Years)	Range (ng/dL)	Mean (ng/dL)
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Females

1	<9.2	<2.5-10.0	4.9
2	9.2-13.7	7.0-28.0	18.0
3	10.0-14.4	15.0-35.0	25.0
4	10.7-15.6	13.0-32.0	22.0
5	11.8-18.6	20.0-38.0	28.0

ADULTS

>or=18 Years	Range (ng/dL)
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Males	350.0-1030.0
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Females

Premenopausal	10.0-55.0
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Postmenopausal	7.0-40.0
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Testosterone % Free+Weakly Bound Ref Ranges:

Female: 3.0 – 18.0%

Male: 9.0 – 46.0%

Testosterone, F+W Bound:

Female: 0.0 – 9.5 ng/dL

Male: 40.0 – 250.0 ng/dL

Specimen Requirements:

Container/Tube:

Preferred: Red Top

Acceptable: Serum gel

Submission

Container/Tube: Plastic vial

Specimen Volume: 2 mL

- Collection** 1. Draw blood in a plain red-top tube(s).
Instructions: 2. Within one hour of collection, centrifuge and aliquot 2 mL serum into a plastic vial.
3. Ship refrigerated.

Minimum Volume: 1.4 mL (does not allow for repeat testing)

Specimen Stability Information:

Specimen Type	Temperature	Time
Serum Red	Refrigerated (Preferred)	7 days
	Ambient	7 days

CPT Code:

84410

Day(s) Performed: Daily

Report Available: 6 to 10 days

Questions

Contact Joshua Yang, Laboratory Technologist Resource Coordinator at 800-533-1710.