

Normal Testosterone Levels in Men by Age (Healthy)

Vermeulen, A. (1996). Declining androgens with age: an overview. In Vermeulen, A. & Odgens, & B. J. (Eds.), *Androgens and the Aging Male* (pp. 3-14). New York: Parthenon Publishing.

Measurements in European Units (nmol/L)

Age	Number of Subjects	Total Testosterone	Standard Deviation	Free Testosterone	Standard Deviation	SHBG	Standard Deviation
25-34	45	21.38	5.90	0.428	0.098	35.5	8.8
35-44	22	23.14	7.36	0.356	0.043	40.1	7.9
45-54	23	21.02	7.37	0.314	0.075	44.6	8.2
55-64	43	19.49	6.75	0.288	0.073	45.5	8.8
65-74	47	18.15	6.83	0.239	0.078	48.7	14.2
75-84	48	16.32	5.85	0.207	0.081	51.0	22.7
85-100	21	13.05	4.63	0.186	0.080	65.9	22.8

Measurements Converted to (ng/dl)

Age	Number of Subjects	Total Testosterone	Standard Deviation	Free Testosterone	Standard Deviation	SHBG (nmol/L)	Standard Deviation
25-34	45	617	170	12.3	2.8	35.5	8.8
35-44	22	668	212	10.3	1.2	40.1	7.9
45-54	23	606	213	9.1	2.2	44.6	8.2
55-64	43	562	195	8.3	2.1	45.5	8.8
65-74	47	524	197	6.9	2.3	48.7	14.2
75-84	48	471	169	6.0	2.3	51.0	22.7
85-100	21	376	134	5.4	2.3	65.9	22.8

What is a Healthy Testosterone Level? According to Functional Medicine peer reviewed research:

- 550ng/dL Total T is optimal!
- 400ng/dL is a set up for increased risk of disease in the future, and looking & feeling nothing like a man who is at the Functional Medicine optimal.
- 350ng/dL increased incidence of disease still lurks.
- < 348ng/dL is considered “hypogonadal”. Physician will prescribe bioidentical or synthetic testosterone hormone replacement therapy [HRT] via cream, injection, or rectal seed to get total T up to 350ng/dl. HRT has risks including testicular atrophy, shutting down the natural production of T, and interaction with medications, namely statin drugs.

Standard reference ranges [e.g. LabCorp) are too broad- non-specific:

- TOTAL T 348 - 1197ng/dL
- FREE T 6.8 - 21.5pg/mL