

**Reporting Title:** 25-Hydroxyvitamin D2 and D3, S**Performing Location:** Jacksonville**Specimen Requirements:****Collection Container/Tube:****Preferred:** Red top**Acceptable:** Serum gel**Submission Container/Tube:** Plastic vial**Specimen Volume:** 0.5 mL**Collection Instructions:** Centrifuge and aliquot serum into a plastic vial within 2 hours of specimen collection.**Forms:**

If not ordering electronically, complete, print, and send 1 of the following forms with the specimen:

[-General Request \(T239\)](#)[-Renal Diagnostics Test Request \(T830\)](#)

Specimen Type	Temperature	Time	Special Container
Serum	Ambient	7 days	
	Refrigerated (preferred)	28 days	
	Frozen	30 days	

**Result Codes:**

Result ID	Reporting Name	Type	Unit	LOINC®
2897	25-Hydroxy D2	Numeric	ng/mL	49054-0
2898	25-Hydroxy D3	Numeric	ng/mL	1989-3
83670	25-Hydroxy D Total	Alphanumeric	ng/mL	62292-8

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

**Supplemental Report:**

No

**CPT Code Information:**

82306

**Reference Values:**

TOTAL 25-HYDROXYVITAMIN D2 AND D3 (25-OH-VitD)

&lt;10 ng/mL (severe deficiency)\*

10-19 ng/mL (mild to moderate deficiency)\*\*

20-50 ng/mL (optimum levels)\*\*\*

51-80 ng/mL (increased risk of hypercalciuria)\*\*\*\*

&gt;80 ng/mL (toxicity possible)\*\*\*\*\*

\*Could be associated with osteomalacia or rickets

\*\*Might be associated with increased risk of osteoporosis or secondary hyperparathyroidism

\*\*\*Optimum levels in the healthy population

\*\*\*\*Sustained levels >50 ng/mL 25OH-VitD along with prolonged calcium supplementation may lead to hypercalciuria and decreased kidney function

\*\*\*\*\*80 ng/mL is the lowest reported level associated with toxicity in patients without primary hyperparathyroidism who have normal kidney function. Most patients with toxicity have levels >150 ng/mL. Patients with kidney failure can have very high 25-OH-VitD levels without any signs of toxicity, as renal conversion to the active hormone 1,25-OH-VitD is impaired or absent.

These reference ranges represent clinical decision values, based on the 2011 Institute of Medicine report, that apply to males and females of all ages, rather than population-based reference values. Population reference ranges for 25-OH-VitD vary widely depending on ethnic background, age, geographic location of the studied populations, and the sampling season. Population-based ranges correlate poorly with serum 25-OH-VitD concentrations that are associated with biologically and clinically relevant vitamin D effects and are therefore of limited clinical value.

For International System of Units (SI) conversion for Reference Values, see

[www.mayocliniclabs.com/order-tests/si-unit-conversion.html](http://www.mayocliniclabs.com/order-tests/si-unit-conversion.html).