

Test Name **Gender** **Age** **Normal Range**

The reference ranges for patients of unspecified gender encompass all normal values for a person of that age. For some analytes, the specific male or female reference range may be narrower. Please reference the table below for age and gender specific ranges.

Albumin	Male	0 min-3 days	2.80-4.40 gm/dL
	Male	4 days-15 years	3.80-5.40
	Male	16-20 years	4.20-5.30
	Male	21-30 years	4.30-5.20
	Male	31-35 years	4.20-5.20
	Male	36-45 years	4.20-5.10
	Male	46-55 years	4.10-5.00
	Male	56-60 years	4.00-5.00
	Male	61-65 years	4.00-4.90
	Male	66-75 years	3.90-4.90
	Male	76-80 years	3.80-4.80
	Male	81-150 years	3.70-4.80
	Female	0 min-3 days	2.80-4.40 gm/dL
	Female	4 days-15 years	3.80-5.40
	Female	16-30 years	4.00-5.10
	Female	31-40 years	3.90-5.00
	Female	41-60 years	3.90-4.90
	Female	61-80 years	3.80-4.80
	Female	81-150 years	3.70-4.70
	Alkaline Phosphatase	Male & Female	0-13 days
Male & Female		14 days - <1 year	113-443
Male & Female		1-9 years	132-315
Male & Female		10-12 years	119-393
Male		13-14 years	107-442
Male		15-16 years	75-312
Male		17-18 years	49-139
Male		19-25 years	38-123
Male		26-50 years	38-114
Male		51-60 years	38-119
Male		61-65 years	43-119
Male		66-75 years	43-123
Male		76-80 years	44-136
Male		81-150 years	43-136
Female		13-14 years	52-239
Female		15-16 years	45-108
Female		17-18 years	40-80
Female		19-25 years	28-110
Female		26-50 years	28-114
Female		51-60 years	28-119
Female	61-65 years	28-123	

Test Name	Gender	Age	Normal Range
Alkaline Phosphatase (cont'd)	Female	66-75 years	40-123
	Female	76-80 years	40-128
	Female	81-150 years	40-132
ALT (SGPT)	Male	0-15 years	0-40 U/L
	Male	16-20 years	0-50
	Male	21-25 years	0-60
	Male	26-40 years	0-65
	Male	41-50 years	0-60
	Male	51-55 years	0-55
	Male	56-60 years	0-50
	Male	61-65 years	0-45
	Male	66-80 years	0-40
	Male	81-150 years	0-35
	Female	0-60 years	0-40
	Female	61-70 years	0-35
	Female	71-150 years	0-30
	ASO	Male & Female	0-11 years
Male & Female		12-17 years	0-160
Male & Female		18-150 years	0-120
AST	Male	0-<1 years	10-100 U/L
	Male	1-2 years	5-80
	Male	3-8 years	0-60
	Male	9-15 years	0-50
	Male	16-30 years	0-45
	Male	31-45 years	0-50
	Male	46-50 years	0-45
	Male	51-150 years	0-40
	Female	0-<1 years	10-100
	Female	1-2 years	29-42
	Female	3-8 years	0-60
	Female	9-15 years	0-50
	Female	16-25 years	0-35
	Female	26-150 years	0-40
Bicarbonate (HCO ₃)	Male & Female	0-4 years	15-25 MMOL/L
	Male & Female	5-150 years	18-30

Test Name	Gender	Age	Normal Range
Bilirubin, Direct	Male & Female	0-15 years	0.00-0.40 mg/dL
	Male	16-150 years	0.00-0.30 mg/dL
	Female	16-150 years	0.00-0.20 mg/dL
Bilirubin, Total	Male & Female	0-<1 days	2.0-6.0 mg/dL
	Male & Female	1-2 days	3.0-10.0
	Male & Female	3-5 days	4.0-12.0
	Male & Female	6 days – 2 months	1.0-6.0
	Male & Female	3 months – 16 years	0.1-1.2
	Male	17-31 years	0.1-1.5
	Male	32-51 years	0.1-1.4
	Male	52-150 years	0.1-1.3
	Female	17-31 years	0.1-1.1
	Female	32-150 years	0.1-1.0
BUN (Blood Urea Nitrogen)	Male	0-20 years	5.00-20.00 mg/dL
	Male	21-35 years	5.00-21.00
	Male	36-40 years	5.00-22.00
	Male	41-55 years	5.00-23.00
	Male	56-70 years	5.00-25.00
	Male	71-75 years	5.00-26.00
	Male	76-80 years	5.00-28.00
	Male	81-150 years	5.00-30.00
	Female	0-15 years	5.00-20.00
	Female	16-25 years	5.00-17.00
	Female	26-35 years	5.00-18.00
	Female	36-45 years	5.00-19.00
	Female	46-50 years	5.00-20.00
	Female	51-60 years	5.00-22.00
	Female	61-75 years	5.00-24.00
	Female	76-80 years	5.00-26.00
	Female	81-150 years	5.00-28.00
	Calcium	Male & Female	0-<1 month
Male & Female		1 month - 150 yrs	8.50-10.50
Carotene	Male & Female	0-<9 months	0 ug/dL
	Male & Female	9 months-5 years	5.00-80.00
	Male & Female	6-16 years	9.00-190.00
	Male & Female	17-150 years	6.00-77.00

Test Name	Gender	Age	Normal Range
Complement, C3	Male & Female	0-<1 day	59-121 mg/dL
	Male & Female	1 day-<1 month	54-129
	Male & Female	1-<2 months	61-154
	Male & Female	2-<3 months	66-136
	Male & Female	3-<4 months	64-182
	Male & Female	4-<5 months	66-174
	Male & Female	5-<6 months	77-178
	Male & Female	6-<9 months	78-173
	Male & Female	9 months-<1 year	76-187
	Male & Female	1 year	87-181
	Male & Female	2 years	84-177
	Male & Female	3 years	80-178
	Male & Female	4-5 years	89-173
	Male & Female	6-7 years	91-161
	Male & Female	8-9 years	92-203
	Male & Female	10-150 years	73-183
	Coprotophyrin, Random Urine	Male & Female	0-<1 years
Male & Female		1-10 years	10.10-254.70
Male & Female		11-17 years	11.80-107.20
Male & Female		18-150 years	23.00-130.00
Cortisol, AM	Male & Female	2-15 days	0.5-12.3 ug/dL
	Male & Female	15 days-1 year	0.5-16.6
	Male & Female	1-9 years	1.7-10.8
	Male & Female	9-14 years	2.2-12.7
	Male & Female	14-17 years	2.8-16.4
	Male & Female	17-19 years	3.5-18.3
	Male & Female	19-150 years	3.7-19.4
Cortisol, PM	Male & Female	2-15 days	0.5-12.3 ug/dL
	Male & Female	15 days-1 year	0.5-16.6
	Male & Female	1-9 years	1.7-10.8
	Male & Female	9-14 years	2.2-12.7
	Male & Female	14-17 years	2.8-16.4
	Male & Female	17-19 years	3.5-18.3
	Male & Female	19-150 years	2.9-17.3
Cortisol, Free Urine	Male & Female	0-<1 years	0.00 ug/day
	Male & Female	1-4 years	0.90-8.20
	Male & Female	5-9 years	1.00-30.00
	Male & Female	10-13 years	1.00-45.00
	Male & Female	14-17 years	3.00-55.00
	Male & Female	18-150 years	4.00-50.00

Test Name	Gender	Age	Normal Range
Creatinine	Male & Female	0-1 years	0.3-0.6 mg/dL
	Male & Female	1-9 years	0.4-1.0
	Male	10-15 years	0.5-1.4
	Male	16-45 years	0.5-1.2
	Male	46-60 years	0.5-1.3
	Male	61-70 years	0.5-1.4
	Male	71-75 years	0.5-1.5
	Male	76-80 years	0.5-1.7
	Male	81-150 years	0.5-1.8
	Female	10-15 years	0.5-1.3
	Female	16-45 years	0.5-1.0
	Female	46-60 years	0.5-1.1
	Female	61-70 years	0.5-1.2
	Female	71-75 years	0.5-1.3
	Female	76-80 years	0.5-1.4
	Female	81-150 years	0.5-1.5
	Digoxin	Male & Female	0-<1 years
Male & Female		1-12 years	0.8-3.0
Male & Female		13-150 years	0.8-2.0
Fecal Fat, Quant	Male & Female	0-5 years	0-2.00 grams
	Male & Female	6-150 years	0-7.00 grams
Ferritin	Male & Female	4-15 days	100-717 ng/mL
	Male & Female	15 days-2 months	14-647
	Male & Female	2 months – 12 years	32-277
	Male	13-150 years	32-356
	Female	13-150 years	20-177
GGT	Male & Female	0-6 days	0.00-200.00 U/L
	Male & Female	1 week-<1 year	0.00-100.00
	Male	1-150 years	0.00-65.00
	Female	1-150 years	0.00-45.00
Glucose, Fasting	Male & Female	0- 6 days	40.00-60.00 mg/dL
	Male & Female	1 week-150 years	70.00-100.00
Haptoglobin	Male & Female	0-<6 months	0.00-100.00 mg/dL
	Male & Female	6 months-150 years	37.00-184.00

Test Name	Gender	Age	Normal Range	
Hematocrit	Male	0-13 days	40.00-72.00 %	
	Male	2 weeks-<1 month	32.00-55.00	
	Male	1-<3 months	30.00-54.00	
	Male	3-<5 months	28.00-40.50	
	Male	6 months-<1 year	30.00-42.00	
	Male	1-3 years	30.00-44.00	
	Male	4-7 years	30.00-46.00	
	Male	8-11 years	32.00-48.00	
	Male	12-13 years	34.50-52.00	
	Male	14-15 years	37.00-52.00	
	Male	16-20 years	40.00-50.30	
	Male	21-30 years	40.90-50.80	
	Male	31-40 years	40.70-50.80	
	Male	41-50 years	40.20-50.80	
	Male	51-60 years	39.50-51.10	
	Male	61-150 years	38.30-51.20	
	Female	0-13 days	40.00-72.00	
	Female	2 weeks-<1 month	32.00-55.00	
	Female	1-<2 months	30.00-54.00	
	Female	3-<6 months	28.00-40.50	
	Female	6 months-<1 year	30.00-42.00	
	Female	1-3 years	30.00-44.00	
	Female	4-7 years	30.00-46.00	
	Female	8-11 years	32.00-48.00	
	Female	12-15 years	34.50-47.00	
	Female	16-20 years	33.90-45.10	
	Female	21-30 years	33.90-45.50	
	Female	31-40 years	35.00-46.10	
	Female	41-50 years	35.80-46.90	
	Female	51-60 years	36.40-47.70	
	Female	61-150 years	35.70-47.80	
	Hemoglobin	Male	0-13 days	14.00-23.00 gm/dL
		Male	2 weeks-<1 month	11.00-18.00
		Male	1-<2 months	9.80-17.80
Male		3-<5 months	9.60-13.40	
Male		6 months-<1 year	10.20-13.80	
Male		1-3 years	10.20-14.40	
Male		4-7 years	10.50-15.10	
Male		8-11 years	10.90-15.80	
Male		12-13 years	11.50-16.50	
Male		14-15 years	12.40-17.10	
Male		16-20 years	13.40-17.30	
Male		21-30 years	13.80-17.40	

Test Name	Gender	Age	Normal Range
Hemoglobin (cont'd)	Male	31-40 years	13.60-17.40
	Male	41-50 years	13.40-17.40
	Male	51-60 years	13.10-17.30
	Male	61-150 years	12.50-17.30
	Female	0-13 days	14.00-23.00
	Female	2 weeks-<1 month	11.00-18.00
	Female	1-<2 months	9.80-17.80
	Female	3-<5 months	9.60-13.40
	Female	6 months-<1 year	10.20-13.80
	Female	1-3 years	10.20-14.40
	Female	4-7 years	10.50-15.10
	Female	8-11 years	10.90-15.80
	Female	12-15 years	11.50-16.00
	Female	16-20 years	11.20-15.20
	Female	21-30 years	11.20-15.30
	Female	31-40 years	11.40-15.50
	Female	41-50 years	11.60-15.70
	Female	51-60 years	11.80-15.90
	Female	61-150 years	11.60-15.90
	LDH	Male & Female	0-1 day
Male & Female		2 day -1 month	400-800
Male & Female		1 month-2 years	200-500
Male & Female		3-4 years	100-350
Male & Female		5-150 years	100-250
MCH	Male	0-13 days	30.00-39.50 pg
	Male	2 weeks-<1 month	28.00-35.00
	Male	1 month-15 years	25.00-34.00
	Male	16-20 years	26.90-32.50
	Male	21-30 years	27.20-32.70
	Male	31-40 years	27.30-33.10
	Male	41-50 years	27.50-33.50
	Male	51-150 years	27.60-33.80
	Female	0-13 days	30.00-39.50
	Female	2 weeks-<1 month	28.00-35.00
	Female	1 month-15 years	25.00-34.00
	Female	16-20 years	25.80-32.40
	Female	21-30 years	26.00-32.60
	Female	31-40 years	26.00-33.00
	Female	41-50 years	26.10-33.30
	Female	51-60 years	26.70-33.20
	Female	61-150 years	26.80-33.30



Age and Gender Specific Reference Ranges

Test Name	Gender	Age	Normal Range	
MCHC	Male	0-15 years	32.30-36.50 gm/dL	
	Male	16-30 years	32.10-35.90	
	Male	31-40 years	32.00-35.90	
	Male	41-50 years	31.90-35.70	
	Male	51-60 years	31.80-35.70	
	Male	61-150 years	31.60-35.50	
	Female	0-15 years	32.30-36.50	
	Female	16-30 years	31.30-35.30	
	Female	31-40 years	31.20-35.00	
	Female	41-50 years	31.00-34.90	
	Female	51-60 years	31.00-34.80	
	Female	61-150 years	30.90-34.70	
	MCV	Male	0-13 days	91.00-120.00 fL
		Male	2 weeks-<1 month	86.00-106.00
Male		1-<3 months	77.00-103.00	
Male		3-<6 months	73.00-92.00	
Male		6 months-<1 year	73.00-87.00	
Male		1-3 years	73.00-90.00	
Male		4-7 years	75.00-92.00	
Male		8-11 years	76.00-93.00	
Male		12-15 years	78.00-97.00	
Male		16-20 years	81.00-95.20	
Male		21-30 years	81.50-95.80	
Male		31-40 years	81.60-96.80	
Male		41-50 years	82.50-98.50	
Male		51-60 years	83.30-99.60	
Male		61-150 years	83.70-99.80	
Female		0-13 days	91.00-120.00	
Female		2 weeks-<1 month	86.00-106.00	
Female		1-<3 months	77.00-103.00	
Female		3-<6 months	73.00-92.00	
Female		6 months-<1 year	73.00-87.00	
Female		1-3 years	73.00-90.00	
Female		4-7 years	75.00-92.00	
Female		8-11 years	76.00-93.00	
Female		12-15 years	78.00-97.00	
Female		16-20 years	80.10-96.10	
Female		21-30 years	80.30-97.30	
Female		31-40 years	80.90-98.70	
Female		41-50 years	81.70-100.00	
Female		51-60 years	82.80-99.80	
Female		61-150 years	83.20-100.50	



Age and Gender Specific Reference Ranges

Test Name	Gender	Age	Normal Range
MPV	Male & Female	0-150 years	9.30-12.90 fL
Osmolality, Serum	Male & Female	0-6 days	265-295 mOsm/kg
	Male & Female	1 week-59 years	275-295
	Male & Female	60-150 years	280-300
Platelet Count	Male	0-15 years	150.00-480.00 109/L
	Male	16-20 years	159.00-359.00
	Male	21-30 years	161.00-361.00
	Male	31-40 years	156.00-365.00
	Male	41-50 years	156.00-367.00
	Male	51-60 years	150.00-360.00
	Male	61-150 years	146.00-367.00
	Female	0-15 years	150.00-480.00
	Female	16-20 years	174.00-404.00
	Female	21-30 years	172.00-411.00
	Female	31-40 years	177.00-419.00
	Female	41-50 years	180.00-427.00
	Female	51-60 years	177.00-414.00
	Female	61-150 years	170.00-422.00
	Potassium (K), Serum	Male & Female	0 min -1 year
Male & Female		1-150 years	3.50-5.50
Prolactin	Male		2.1-17.7 ng/ml
	Female	Non-Pregnant	2.8-29.2
	Female	Pregant	9.7-208.5
	Female	Post- menopausal	1.8-20.3
Protein, CSF	Male & Female	0-<1 month	20-170 mg/dL
	Male & Female	1-<3 months	20-100
	Male & Female	3-<6 months	15-50
	Male & Female	6 months-150 years	15-45
Protein Total, Serum	Male	0-<1 month	4.50-7.00 gm/dL
	Male	1 month-2 years	5.50-7.50
	Male	3-15 years	6.00-8.40
	Male	16-35 years	6.70-8.40
	Male	36-40 years	6.70-8.30
	Male	41-45 years	6.70-8.20
	Male	46-55 years	6.60-8.20
	Male	56-70 years	6.50-8.20
	Male	71-75 years	6.40-8.10
	Male	76-80 years	6.30-8.10



Age and Gender Specific Reference Ranges

Test Name	Gender	Age	Normal Range
Protein Total, Serum (cont'd)	Male	81-150 years	6.10-8.10
	Female	0-<1 month	4.50-7.00
	Female	1 month-<2 years	5.50-7.50
	Female	1-15 years	6.00-8.40
	Female	16-35 years	6.70-8.30
	Female	36-40 years	6.60-8.30
	Female	41-45 years	6.60-8.20
	Female	46-65 years	6.50-8.20
	Female	66-75 years	6.40-8.20
	Female	76-80 years	6.30-8.20
	Female	81-150 years	6.10-8.20
	RBC	Male	0-13 days
Male		2 weeks-<1 month	3.85-5.30
Male		1-<3 months	3.80-5.10
Male		3-<6 months	3.75-4.80
Male		6 months-<1 year	3.75-4.90
Male		1-3 years	3.85-5.00
Male		4-7 years	4.05-5.17
Male		8-11 years	4.20-5.25
Male		12-13 years	4.25-5.45
Male		14-15 years	4.30-5.45
Male		16-20 years	4.56-5.74
Male		21-30 years	4.57-5.78
Male		31-40 years	4.53-5.73
Male		41-50 years	4.44-5.67
Male		51-60 years	4.39-5.64
Male		61-150 years	4.34-5.61
Female		0-13 days	4.00-6.00
Female		2 weeks-<1 month	3.85-5.30
Female		1-<3 months	3.80-5.10
Female		3-<6 months	3.75-4.80
Female		6 months-<1 year	3.75-4.90
Female		1-3 years	3.85-5.00
Female		4-7 years	4.05-5.17
Female		8-11 years	4.20-5.25
Female		12-15 years	3.79-5.25
Female		16-20 years	3.92-5.13
Female		21-30 years	3.90-5.13
Female		31-40 years	3.94-5.13
Female		41-51 years	3.95-5.16
Female		51-60 years	3.97-5.19
Female		61-150 years	3.93-5.19

Test Name	Gender	Age	Normal Range	
RDW	Male	0-<3 months	11.00-19.00 %	
	Male	3 months-15 years	11.00-16.00	
	Male	16-20 years	11.90-13.90	
	Male	21-30 years	11.90-14.10	
	Male	31-40 years	12.00-14.20	
	Male	41-50 years	12.10-14.50	
	Male	51-60 years	12.10-14.70	
	Male	61-150 years	12.20-15.00	
	Female	0-<3 months	11.00-19.00	
	Female	3 months-15 years	11.00-16.00	
	Female	16-20 years	11.80-14.80	
	Female	21-30 years	11.90-14.80	
	Female	31-40 years	12.00-14.90	
	Female	41-50 years	12.10-15.20	
	Female	51-60 years	12.20-15.10	
	Female	61-150 years	12.20-15.30	
	Retic count	Male & Female	0-<2 weeks	100-390 x10 ⁹ /L
		Male & Female	2 weeks-150 years	24-90
Sodium (Na), Serum	Male & Female	0-<1 months	135-145 mmol/L	
	Male & Female	1 month-<3 months	133-145	
	Male & Female	3 months-11 years	138-145	
	Male & Female	12-150 years	135-145	
T4	Male & Female	0-<1 week	9.00-26.00 ug/dL	
	Male & Female	1 week-<1 month	8.00-20.00	
	Male & Female	1 month-<1 year	7.00-17.00	
	Male & Female	1-4 years	5.00-13.00	
	Male & Female	5-150 years	5.50-12.00	
Triglycerides	Male & Female	0-9 years	30-100 mg/dL	
	Male & Female	10-14 years	30-125	
	Male & Female	15-19 years	35-150	
	Male & Female	20-150 years	30-150	
TSH	Male	0-<1 month	0.76-16.11 uIL/mL	
	Male	1 month-4 years	0.80-7.52	
	Male	5-15 years	0.61-6.39	
	Male	16-150 years	0.30-5.00	
	Female	0-<1 month	0.96-13.68	
	Female	1 month-4 years	0.70-8.55	
	Female	5-15 years	0.60-6.18	
	Female	16-150 years	0.30-5.00	



Age and Gender Specific Reference Ranges

Test Name	Gender	Age	Normal Range
WBC	Male	0-<2 years	6.00-17.50 10 ⁹ /L
	Male	2-60 years	6.00-14.50
	Male	7-150 years	4.30-11.00
	Female	0-<2 years	6.00-17.50
	Female	2-6 years	6.00-14.50
	Female	7-150 years	4.30-11.00



Age and Gender Specific Reference Ranges

Test Name

Gender

Age

Normal Range



Age and Gender Specific Reference Ranges

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