

## Age and Gender Specific Reference

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.

<u>Test</u>	<u>Gender</u>	<u>Age</u>	<u>Normal Range</u>
Albumin	Male & Female	0-14 days	3.30-4.50 gm/dL
	Male & Female	15 days - < 1year	2.80-4.70
	Male & Female	1-7 years	3.80-4.70
	Male & Female	8-14 years	4.10-4.80
	Male	15-18 years	4.10-5.10
	Male	19-20 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	15-18 years	4.00-4.90
	Female	19-30 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	0-14 days	90-273 U/L
	Male & Female	15 days - <1 year	134-518
	Male & Female	1-9 years	156-369
	Male & Female	10-12 years	141-460
	Male	13-14 years	127-517
	Male	15-16 years	89-365
	Male	17-18 years	59-164
	Male	19-150 years	40-150
	Female	13-14 years	62-280
	Female	15-16 years	54-128
	Female	17-18 years	48-95
	Female	19-150 years	40-150
	ALT (SGPT)	Male & Female	0 - < 1 year
Male & Female		1-12 years	0-25
Male & Female		13-18 years	0-24
Male & Female		19-150 years	0-55
Ammonia	Male & Female	0 – 2 weeks	54-161 mmol/L
	Male & Female	2 weeks -1 month	21-107
	Male & Female	1 month – 150 years	0-72

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<u>Test</u>	<u>Gender</u>	<u>Age</u>	<u>Normal Range</u>
Amylase	Male & Female	0-14 days	0-10 U/L
	Male & Female	15 days - 12 weeks	0-22
	Male & Female	13 weeks - < 1 year	0-50
	Male & Female	1-18 years	0-101
	Male & Female	19-70 years	0-125
	Male & Female	71-150 years	0-160
Apolipoprotein A1	Male	0-14 days	62-91 mg/dL
	Male	15 days - < 1 year	53-175
	Male	1-13 years	80-164
	Male	14-18 years	72-154
	Male	19-150 years	94-178
	Female	0-14 days	71-97
	Female	15 days - < 1 year	53-175
	Female	1-13 years	80-164
	Female	14-18 years	72-154
	Female	19-150 years	101-199
Apolipoprotein B	Male & Female	0-14 days	9-67 mg/dL
	Male & Female	15 days - < 1 year	19-123
	Male & Female	1-5 years	41-93
	Male & Female	6-18 years	31-84
	Male	19-150 years	55-140
	Female	19-150 years	55-125
ASO	Male & Female	0-11 years	0-200 IU/mL
	Male & Female	12-17 years	0-160
	Male & Female	18-150 years	0-120
AST	Male & Female	0-14 days	0-162U/L
	Male & Female	15 days - < 1 year	0-67
	Male & Female	1-6 years	0-44
	Male & Female	7-11 years	0-36
	Male	12-18 years	0-35
	Male	19-150 years	0-34
	Female	12-18 years	0-26
	Female	19-150 years	0-34
Bicarbonate	Male & Female	0-14 days	5-20 mmol/L
	Male & Female	15 days - < 1 year	10-24
	Male & Female	1-4 years	14-24
	Male & Female	5-14 years	17-26
	Male	15-18 years	18-28
	Male	19-60 years	22-29

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Bicarbonate (cont'd)	Male	61-150 years	23-31
	Female	15-18 years	17-26
	Female	19-60 years	22-29
	Female	61-150 years	23-31
Bilirubin, Direct	Male & Female	0-14 days	0.00-0.70 mg/dL
	Male & Female	15 days - < 1 year	0.00-0.30
	Male & Female	1-8 years	0.00-0.20
	Male & Female	9-12 years	0.00-0.30
	Male & Female	13-18 years	0.00-0.40
	Male & Female	19-150 years	0.00-0.50
Bilirubin, Total	Male	0-14 days	0.0-17.0 mg/dL
	Female	0-14 days	0.0-16.6
	Male & Female	15 days - < 1 year	0.0-0.7
	Male & Female	1-8 years	0.0-0.4
	Male & Female	9-11 years	0.0-0.6
	Male & Female	12-14 years	0.0-0.7
	Male & Female	15-18 years	0.0-0.8
	Male & Female	19-150 years	0.0-1.2
BUN (Blood Urea Nitrogen)	Male	0-14 days	3.00-23.00 mg/dL
	Male	15 days - < 1 year	3.00-17.00
	Male	1-9 years	9.00-22.00
	Male	10-18 years	7.00-21.00
	Male	19-20 years	5.00-20.00
	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	0-14 days	3.00-23.00
	Female	15 days - < 1 year	3.00-17.00
	Female	1-9 years	9.00-22.00
	Female	10-18 years	7.00-19.00
	Female	19-25 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

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<u>Test</u>	<u>Gender</u>	<u>Age</u>	<u>Normal Range</u>
Calcium	Male & Female	0 - <1 year	8.50-11.00 mg/dL
	Male & Female	1-18 years	9.20-10.50
	Male & Female	19-150 years	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
Ceruloplasmin	Male & Female	0 - 31 days	7-24 mg/dL
	Male & Female	1 month -1 year	14-33
	Male & Female	1 year - 4 years	14-39
	Male & Female	4-7 years	22-43
	Male & Female	7-10 years	21-40
	Male	10-13 years	17-35
	Male	13-16 years	20-60
	Male	16-19 years	7-24
	Male	19-150 years	14-33
	Female	10-13 years	21-43
	Female	13-16 years	20-60
	Female	16-19 years	7-24
	Female	19-150 years	14-33
	Chloride, Sweat	Male & Female	0 - 6 months
Male & Female		$\geq$ 7 months	Normal: $\leq$ 39 Intermediate: 40-60 Positive: >60
Cholesterol	Male	0 - 14 days	42-109 mg/dL
	Female	0 - 14 days	46-125
	Male & Female	15 days - < 1 year	64-237
	Male & Female	1-18 years	112-208
	Male & Female	19-150 years	100-200
Complement, C3	Male & Female	0 - <1 day	59-121 mg/dL
	Male & Female	1 day-<1 mo	54-129
	Male & Female	1-<2 mo	61-154
	Male & Female	2-<3 mo	66-136
	Male & Female	3-<4 mo	64-182
	Male & Female	4-<5 mo	66-174
	Male & Female	5-<6 mo	77-178
	Male & Female	6-<9 mo	78-173
	Male & Female	9 mo-<1 year	76-187

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<u>Test</u>	<u>Gender</u>	<u>Age</u>	<u>Normal Range</u>
Complement, C3 (cont'd)	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
Coproporphyrin, Random Urine	Male & Female	0 - <1 years	0 ug/G
	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 years	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
Creatine Phosphokinase (CPK, CK)	Male & Female	0 - <1 week	500 U/L
	Male & Female	1 week - <1 month	300
	Male	1 month – 150 years	200
	Female	1 month – 150 years	168

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<u>Test</u>	<u>Gender</u>	<u>Age</u>	<u>Normal Range</u>
Creatinine	Male & Female	0 - 14 days	0.32-0.92 mg/dL
	Male & Female	15 days - 1 year	0.10-0.36
	Male & Female	2-4 years	0.20-0.43
	Male & Female	5-11 years	0.31-0.61
	Male & Female	12-14 years	0.45-0.81
	Male	15-18 years	0.62-1.08
	Male	19-45 years	0.50-1.20
	Male	46-60 years	0.50-1.30
	Male	61-70 years	0.50-1.40
	Male	71-75 years	0.50-1.50
	Male	76-80 years	0.50-1.70
	Male	81-150 years	0.50-1.80
	Female	15-18 years	0.49-0.84
	Female	19-45 years	0.50-1.00
	Female	46-60 years	0.50-1.10
	Female	61-70 years	0.50-1.20
	Female	71-75 years	0.50-1.30
	Female	76-80 years	0.50-1.40
	Female	81-150 years	0.50-1.50
CRP-HS	Male & Female	0 - 14 days	0.0-6.1 mg/L
	Male & Female	15 days -14 years	0.0-1.0
	Male & Female	15 - 18 years	0.0-1.7
	Male & Female	19 - 150 years	0.0-1.0
Digoxin	Male & Female	0 - <1 years	0.8-3.5 ng/mL
	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
FSH	Male	30 days - 1 years	0.09-2.41 mIU/mL
		1 -5 years	0.00-0.91
		5 - 10 years	0.00-1.62
		10-13 years	0.35-3.91
		19-150 years	1.4-18.1

(\* See interpretive data for Tanner Stage ranges)

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<u>Test</u>	<u>Gender</u>	<u>Age</u>	<u>Normal Range</u>
FSH (cont'd)	Female	30 days - 1 years	0.38-10.35 mIU/mL
		1-9 years	0.42-5.45
		9-11 years	0.44-4.22
		11-19 years	0.26-7.77
		19-150 years	
		Follicular	2.5-10.2
		Midcycle	3.4-33.4
		Luteal	1.5-9.1
		Postmenopausal	23.0-116.0
		Pregnant	<0.3
GGT	Male & Female	0 - 14 d	0.00-219.00 U/L
	Male & Female	15 d - < 1 yr	0.00-127.00
	Male & Female	1-10 years	0.00-16.00
	Male & Female	11-18 years	0.00-21.00
	Male	19-150 years	0.00-64.00
	Female	19-150 years	0.00-36.00
	Glucose, Fasting	Male & Female	0 - 6 days
Male & Female		1 week-150 years	70.00-100.00
Haptoglobin	Male & Female	0 - 14 days	0.00-10.00 mg/dL
	Male & Female	15 days - < 1 year	7.00-221.00
	Male & Female	1 - 11 years	7.00-163.00
	Male & Female	12 - 18 years	7.00-179.00
	Male & Female	19 - 150 years	37.00-184.00
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-<6 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

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<u>Test</u>	<u>Gender</u>	<u>Age</u>	<u>Normal Range</u>
Hematocrit (cont'd)	Female	0 - 13 days	40.00-72.00
	Female	2 weeks-<1 month	32.00-55.00
	Female	1-<3 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-<3 months	9.80-17.80
	Male	3-<6 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
	Male	31-40 years	13.60-17.40
	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-<3 months	9.80-17.80
	Female	3-<6 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



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<u>Test</u>	<u>Gender</u>	<u>Age</u>	<u>Normal Range</u>
HDL Cholesterol	Male & Female	0 - 14 days	15-42 mg/dL
	Male & Female	15 days - < 1 year	12-71
	Male & Female	1-3 years	31-63
	Male & Female	4-12 years	36-73
	Male	13-18 years	32-68
	Male	19-150 years	40-125
	Female	13-18 years	32-72
	Female	19-150 years	40-125
Homocysteine	Male & Female	5 days - 1 year	2.9-10.0 mmol/L
	Male & Female	1-7 years	2.8-7.6
	Male & Female	7-12 years	3.4-8.5
	Male & Female	12-15 years	4.7-10.4
	Male	15-19 years	5.5-13.4
	Male	19-150 years	0.0-15.4
	Female	15-19 years	4.9-11.9
	Female	19-150 years	0.0-15.4
Iron	Male	0-13 years	16-128 ug/dL
	Male	14-18 years	31-168
	Male	19-150 years	37-167
	Female	0-13 years	16-128
	Female	14-18 years	20-162
	Female	19-150 years	33-167
LDH	Male & Female	0 - 14 days	309-1222 U/L
	Male & Female	15 days -< 1 year	163-452
	Male & Female	1 - 9 years	192-321
	Male	10-14 years	170-283
	Male	15-18 years	130-250
	Male	19-150 years	117-278
	Female	10-14 years	157-272
	Female	15-18 years	130-250
	Female	19-150 years	117-278
Lipase	Male & Female	0 - 18 years	0-39 U/L
	Male & Female	19-150 years	0-60
Magnesium	Male & Female	0 - 14 days	2.0-3.9 mg/dL
	Male & Female	15 days -< 1 year	2.0-3.1
	Male & Female	1 - 18 years	2.1-2.8
	Male & Female	19-150 years	1.6-2.8

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<u>Test</u>	<u>Gender</u>	<u>Age</u>	<u>Normal Range</u>
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
	MCHC	Male	0-15 years
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	81.00-95.30
	Male	21-30 years	81.50-97.10
	Male	31-40 years	81.60-98.10
	Male	41-50 years	82.50-99.40

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<u>Test</u>	<u>Gender</u>	<u>Age</u>	<u>Normal Range</u>	
MCV (cont'd)	Male	51-60 years	83.30-100.90	
	Male	61-70 years	83.70-101.20	
	Male	>70 years	83.70-103.10	
	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	80.10-97.70	
	Female	21-30 years	80.30-98.70	
	Female	31-40 years	80.90-100.00	
	Female	41-50 years	81.70-101.00	
	Female	51-60 years	82.80-101.50	
	Female	61-70 years	83.20-102.10	
	Female	>70 years	83.20-103.50	
	MPV	Male	0-15 years	9.30-12.90 fL
Male		16-20 years	9.5-12.8	
Male		21-30 years	9.5-12.8	
Male		31-40 years	9.4-12.8	
Male		41-50 years	9.4-12.9	
Male		51-60 years	9.5-12.9	
Male		>60 years	9.5-12.8	
Female		0-15 years	9.3-12.9	
Female		16-20 years	9.4-12.8	
Female		21-30 years	9.4-12.9	
Female		31-40 years	9.4-12.8	
Female		41-50 years	9.4-12.8	
Female		51-60 years	9.4-12.8	
Female		>60 years	9.5-12.9	
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	
Phenobarbital	Male & Female	0-4 years	15-30 mcg/mL	
	Male & Female	5-150 years	15-40	

## Age and Gender Specific Reference

<u>Test</u>	<u>Gender</u>	<u>Age</u>	<u>Normal Range</u>
Phosphorus	Male & Female	0-14 days	5.6-10.5 mg/dL
	Male & Female	15days - < 1 year	4.8-8.4
	Male & Female	1-4 years	4.3-6.8
	Male & Female	5-12 years	4.1-5.9
	Male	13-15 years	3.5-6.2
	Male	16-18 years	2.9-5.0
	Male	19-150 years	2.5-4.5
	Female	13-15 years	3.2-5.5
	Female	16-18 years	2.9-5.0
	Female	19-150 years	2.5-4.5
Platelet Count	Male	0-15 years	150.00-480.00 109/L
	Male	16-50 years	159.00-400.00
	Male	51-150 years	140.00-400.00
	Female	0-15 years	150.00-480.00
	Female	16-150 years	150.00-450.00
Potassium (K), Serum	Male & Female	0 - 1 year	3.50-6.00
	Male & Female	1-150 years	3.50-5.50
Prealbumin	Male & Female	0-14 days	2-12 mg/dL
	Male & Female	15 days - < 1 year	5-24
	Male & Female	1-4 years	12-23
	Male & Female	5-12 years	14-26
	Male & Female	13-15 years	18-31
	Male	16-18 years	20-35
	Male	19-150 years	18-37
	Female	16-18 years	17-33
	Female	19-150 years	18-37
Prolactin	Male		2.1-17.7 ng/ml
	Female	Non-Pregnant	2.8-29.2
	Female	Pregnant	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

## Age and Gender Specific Reference

<u>Test</u>	<u>Gender</u>	<u>Age</u>	<u>Normal Range</u>
Protein Total, Serum	Male & Female	0-14 days	5.30-8.30 gm/dL
	Male & Female	15 days - < 1 year	4.40-7.10
	Male & Female	1-5 years	6.10-7.50
	Male & Female	6-8 years	6.40-7.70
	Male & Female	9-18 years	6.50-8.10
	Male	19-20 years	6.70-8.30
	Male	21-30 years	6.70-8.30
	Male	31-40 years	6.60-8.20
	Male	41-50 years	6.60-8.20
	Male	51-60 years	6.50-8.10
	Male	61-70 years	6.40-8.10
	Male	71-150 years	6.20-8.00
	Female	19-20 years	6.50-8.30
	Female	21-30 years	6.60-8.30
	Female	31-40 years	6.50-8.20
	Female	41-50 years	6.40-8.10
	Female	51-60 years	6.40-8.10
	Female	61-70 years	6.40-8.10
	Female	71-150 years	6.20-8.10
	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

## Age and Gender Specific Reference

<u>Test</u>	<u>Gender</u>	<u>Age</u>	<u>Normal Range</u>	
RBC (cont'd)	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	
RDW-CV	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	
	RDW-SD	Male	0-15 years	38.4-53.1 (fL)
		Male	16-20 years	37.2-45.9
Male		21-30 years	37.2-46.6	
Male		61-40 years	37.7-47.6	
Male		41-50 years	38.3-49.1	
Male		51-60 years	39.0-50.3	
Male		>60 years	39.8-51.6	
Female		0-15 years	38.4-53.1	
Female		16-20 years	37.6-47.9	
Female		21-30 years	38.1-48.6	
Female		61-40 years	38.7-49.6	
Female		41-50 years	39.3-50.8	
Female		51-60 years	39.6-51.2	
Female		>60 years	40.1-52.1	
Retic count		Male & Female	0-<2 weeks	100-390 x10 <sup>9</sup> /L
	Male & Female	2 weeks-150 years	24-90	
Sodium (Na), Serum	Male & Female	0-<3 months	135-145 mmol/L	
	Male & Female	3 months-11 years	138-145	
	Male & Female	12-150 years	135-145	

## Age and Gender Specific Reference

<u>Test</u>	<u>Gender</u>	<u>Age</u>	<u>Normal Range</u>
T3, Free	Male	4 days - 1 year	2.32-4.87 pg/mL
	Male	1-12 years	2.79-4.42
	Male	12-15 years	2.89-4.33
	Male	15-19 years	2.25-3.85
	Male	19-150 years	1.71-3.71
	Female	4 days - 1 year	2.32-4.87 pg/mL
	Female	1-12 years	2.79-4.42
	Female	12-15 years	2.50-3.95
	Female	15-19 years	2.31-3.71
	Female	19-150 years	1.71-3.71
T3, Total	Male	4 days - 1 year	0.85-2.34 ng/mL
	Male	1-12 years	1.13-1.89
	Male	12-15 years	0.98-1.76
	Male	15-17 years	0.94-1.56
	Male	17-19 years	0.90-1.68
	Male	19-150 years	0.60-1.80
	Female	4 days - 1 year	0.85-2.34 ng/mL
	Female	1-12 years	1.13-1.89
	Female	12-15 years	0.98-1.76
	Female	15-17 years	0.94-1.42
	Female	17-19 years	0.90-1.68
	Female	19-150 years	0.60-1.80
T4, Free	Male & Female	5-15 days	1.05-3.21 ng/dL
	Male & Female	15-30 days	0.68-2.53
	Male & Female	30 days - 1 year	0.89-1.70
	Male	1 year - 19 years	0.72-1.23
	Male	19-150 years	0.70-1.48
	Female	1 year - 19 years	0.73-1.17
	Female	19-150 years	0.70-1.48
T4, Total	Male & Female	7 days - 1 year	5.9-13.7 mcg/dL
	Male & Female	1-9 years	6.2-10.3
	Male & Female	9-12 years	5.5-9.3
	Male & Female	12-14 years	5.0-8.3
	Male	14-19 years	4.7-8.6
	Male	19-150 years	5.5-12.0
	Female	14-19 years	5.5-13.0
	Female	19-150 years	5.5-12.0
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

## Age and Gender Specific Reference

<u>Test</u>	<u>Gender</u>	<u>Age</u>	<u>Normal Range</u>
Transferrin	Male & Female	0-8 week	104-224 mg/dL
	Male & Female	9 week - < 1 year	107-324
	Male & Female	1-18 years	220-337
	Male & Female	19-150 years	197-359
Triglycerides	Male & Female	0-14 days	82-259 mg/dL
	Male & Female	15 days - < 1 year	53-258
	Male & Female	1-18 years	44-197
	Male & Female	19-150 years	30-150
Troponin	Male & Female	5-15 days	0.003-0.936 ng/mL
	Male & Female	3 months -19 years	0.000-0.009
	Male & Female	19-150 years	0.000-0.028
TSH	Male & Female	4 days -<6 months	0.730-4.770 uIU/mL
	Male & Female	6 months-14 years	0.700-4.170
	Male & Female	14-19 years	0.470-3.410
	Male & Female	19 - 150 years	0.350-4.940
Uric Acid	Male & Female	0-14 days	2.8-12.7 mg/dL
	Male & Female	15 days - < 1 year	1.6-6.3
	Male & Female	1-11 years	1.8-4.9
	Male	12-18 years	2.6-7.6
	Male	19-150 years	2.5-8.0
	Female	12-18 years	2.6-5.9
	Female	19-150 years	2.5-8.0
WBC	Male	0-<2 years	6.00-17.50 10 <sup>9</sup> /L
	Male	2-15 years	6.00-14.50
	Male	16-150 years	4.00-11.00
	Female	0-<2 years	6.00-17.50
	Female	2-15 years	6.00-14.50
	Female	16-150 years	4.00-11.00