

Test Name	Range Type	Reference Range	Units
Acetaminophen	Therapeutic	<20.0	ug/ml
Albumin		3.5-5.0	g/dl
Alkaline Phosphatase	Male		
Alkaline Phosphatase	0-14 day	83-248	U/L
Alkaline Phosphatase	15 day - <1 yr	122-469	U/L
Alkaline Phosphatase	1 - <10 yr	142-335	U/L
Alkaline Phosphatase	10 - <13 yr	129-417	U/L
Alkaline Phosphatase	13- <15 yr	116-468	U/L
Alkaline Phosphatase	15 - <17 yr	82-331	U/L
Alkaline Phosphatase	17- <19 yr	55-149	U/L
Alkaline Phosphatase	>=19 yr	40-129	U/L
Alkaline Phosphatase	Female		
Alkaline Phosphatase	0-14 day	83-248	U/L
Alkaline Phosphatase	15 day - <1 yr	122-469	U/L
Alkaline Phosphatase	1 - <10 yr	142-335	U/L
Alkaline Phosphatase	10 - <13 yr	129-417	U/L
Alkaline Phosphatase	13- <15 yr	57-254	U/L
Alkaline Phosphatase	15 - <17 yr	50-117	U/L
Alkaline Phosphatase	>=17 yr	35-117	U/L
ALT/SGPT, Alanine Transaminase	Females:	6-37	U/L
ALT/SGPT, Alanine Transaminase	Males	6-45	U/L
Ammonia, NH3	Adults	12-48	umol/L
Ammonia, NH3	Infant Child (7 days to 6 months)	24-48	umol/L
Ammonia, NH3	Newborn (0 up to 7 days)	54-90	umol/L
Amylase		0-88	U/L
Amylase, Urine	Random, single sample	0-400	U/L
Amylase, Urine	Timed	0-15	U/Hr
Anion Gap (formula without K+)		7-16	mmol/L
Anti-cardiolipin IgA		<20	APL units
Anti-cardiolipin IgG		<20	GPL units
Anti-cardiolipin IgM		<20	MPL units
Anti-Nuclear Antibody	Normal	<1:40	titer
Anti-Nuclear Antibody	Borderline	1:80 - 1:160	titer
Anti-Nuclear Antibody	Abnormal	>1:160	
Anti-Streptolysin O Test	<13 yr	<150	IU/ml
Anti-Streptolysin O Test	>13 yr	<200	IU/ml
APT Downey Test	Maternal	Negative	
AST/SGOT, Aspartate Transaminase	Newborn to 1 month	20-80	U/L
AST/SGOT, Aspartate Transaminase	1 month to 13 years	8-60	U/L
AST/SGOT, Aspartate Transaminase	≥13 years & Adult	0-37	U/L
Beta Hydroxybutyrate (Ketone)		0.02-0.27	mmol/L
Bilirubin, Direct		0.0-0.3	mg/dl
Bilirubin, Total	Adults and infants >3 mo	0.0-1.2	mg/dl
Bilirubin, Total	Full term, up to 24 hrs	2-6	mg/dl
Bilirubin, Total	Full term, up to 72 hrs (3 days)	6-10	mg/dl
Bilirubin, Total	Full term, 3 days to 1 month	4-8	mg/dl
Bilirubin, Total	Full term, 1 – 3 months	0.0-1.2	mg/dl
Blood Urea Nitrogen	0-1 yr	4-19	mg/dl
Blood Urea Nitrogen	1-17 yr	5-18	mg/dl
Blood Urea Nitrogen	18-60 yr	6-20	mg/dl

Test Name	Range Type	Reference Range	Units
Blood Urea Nitrogen	> 60 yr	8-23	mg/dl
BNP/ Pro B-Natriuretic Peptide	Male, <45 yr	<93	pg/ml
BNP/ Pro B-Natriuretic Peptide	Male, 45-54	<138	pg/ml
BNP/ Pro B-Natriuretic Peptide	Male, 55-64	<177	pg/ml
BNP/ Pro B-Natriuretic Peptide	Male, 65-74	<229	pg/ml
BNP/ Pro B-Natriuretic Peptide	Male, >75	<852	pg/ml
BNP/ Pro B-Natriuretic Peptide	Female, <45 yr	<178	pg/ml
BNP/ Pro B-Natriuretic Peptide	Female, 45-54	<192	pg/ml
BNP/ Pro B-Natriuretic Peptide	Female, 55-64	<226	pg/ml
BNP/ Pro B-Natriuretic Peptide	Female, 65-74	<353	pg/ml
BNP/ Pro B-Natriuretic Peptide	Female, >75	<624	pg/ml
Caffeine (Neonatal ICU Treatment)	Therapeutic-neonates	5.0-20.0	ug/ml
Calcium		8.6-10.3	mg/dl
Calcium, Ionized		4.5-5.3	mg/dl
Calprotectin (fecal)	Normal	<80	ug/g
Calprotectin (fecal)	Borderline	80-160	ug/g
Calprotectin (fecal)	Elevated	>160	ug/g
Cancer Antigen 125		<35.0	IU/ml
Carboxyhemoglobin	Non Smoker	0-2.5	percent
Carboxyhemoglobin	Smoker	1.5-5.0	percent
Carboxyhemoglobin	Heavy Smoker	up to 10	percent
Carcinoembryonic Antigen	(Roche) Non-smoker	0-3.0	ng/ml
Carcinoembryonic Antigen	(Roche) Smoker	0-5.0	ng/ml
Celiac - Deamidated GP IgA		< 15	U/mL
Celiac - Deamidated GP IgG		< 15	U/mL
Celiac - Tissue transglutaminase IgA		< 15	U/mL
Celiac - Tissue transglutaminase IgG		< 15	U/mL
Chloride		98-108	mmol/L
Chloride, Urine	Timed	100-250	mmol/24 hr
Chol/HDL Ratio	Male 1/2 avg risk	3.4	ratio
Chol/HDL Ratio	Male average risk	5.0	ratio
Chol/HDL Ratio	Male Twice avg risk	9.5	ratio
Chol/HDL Ratio	Male three times avg risk	24.0	ratio
Chol/HDL Ratio	Female 1/2 avg risk	3.3	ratio
Chol/HDL Ratio	Female average risk	4.4	ratio
Chol/HDL Ratio	Female Twice avg risk	7.1	ratio
Chol/HDL Ratio	Female three times avg risk	11.0	ratio
Cholesterol	Desirable	<200	mg/dl
Cholesterol	Borderline High	200-239	mg/dl
Cholesterol	Elevated	>240	mg/dl
CO2 (Bicarbonate) (HCO3)		23-32	mmol/l
Complement C3		86-184	mg/dl
Complement C4		10-40	mg/dl
Cortisol	AM (0600-1000)	6.0-23.0	ug/dl
Cortisol	PM (1600-2000)	2.7-12.0	ug/dl
C-Reactive Protein		<6.0	mg/L
Creatinine	Newborn, 0-4 days,	0.3-1.0	mg/dl
Creatinine	Infant/Child, 5 days to 12 yrs	0.2-0.7	mg/dl
Creatinine	Adolescent 12 to 17 yrs	0.5-1.0	mg/dl
Creatinine	Adult Female	0.6-1.1	mg/dl

Test Name	Range Type	Reference Range	Units
Creatinine	Adult Male	0.7-1.3	mg/dl
Creatinine Clearance		90-130	ml/min
Creatinine Kinase	Male	<206	U/L
Creatinine Kinase	Female	<172	U/L
Creatinine, Urine 24 hr	Male	1000-1900	mg/24 hr
Creatinine, Urine 24 hr	Female	800-1700	mg/24 hr
CRP-High Sensitivity	Low Risk	< 1.0	mg/L
CRP-High Sensitivity	Average Risk	1.0-3.0	mg/L
CRP-High Sensitivity	Higher Risk	>3.0	mg/L
CRP-High Sensitivity	Evaluate for Infection	>10.0	mg/L
D-Dimer		<0.50	ug/ml
Depakene/Valproic Acid	Therapeutic	50.0-100.0	ug/ml
Dilantin/Phenytoin		10.0-20.0	ug/ml
Dilantin (Free)		1.0-2.0	ug/ml
Digoxin	Therapeutic	0.50-2.00	ng/ml
Estradiol	Men	27-52	pg/ml
Estradiol	Women: Follicular Phase	27-156	pg/ml
Estradiol	Mid Cycle Peak	48-314	pg/ml
Estradiol	Luteal Phase	33-298	pg/ml
Estradiol	Post Menopause	<5-50	pg/ml
Estradiol	Pregnant, 1st trimester	154-3065	pg/ml
Estradiol	Pregnant, 2nd trimester	1561-18950	pg/ml
Estradiol	Pregnant, 3rd trimester	10030->30000	pg/ml
Ethanol		Negative (<0.01)	g/dl
Ferritin	Male	30-400	ng/ml
Ferritin	Female	15-150	ng/ml
Folate (Folic Acid), Serum		≥ 4.0	ng/ml
Follicle Stimulating Hormone	Men	1.5-12.4	mIU/ml
Follicle Stimulating Hormone	Women: Follicular Phase	3.5-12.5	mIU/ml
Follicle Stimulating Hormone	Mid Cycle Peak	4.7-21.5	mIU/ml
Follicle Stimulating Hormone	Luteal Phase	1.7-7.7	mIU/ml
Follicle Stimulating Hormone	Post Menopause	25.8-134.8	mIU/ml
Follicle Stimulating Hormone	Children <10 yr	0.2-3.8	mIU/ml
Free T3		2.00-4.40	pg/ml
Free Thyroxine		0.8-1.7	ng/ml
GGT Gamma Glutamyl Transp.	Male	8-61	U/L
GGT Gamma Glutamyl Transp.	Female	5-36	U/L
Globulin		2.0-3.9	mg/dl
Glucose Tolerance	Contact Lab for details		
Glucose, Fasting	Adult normal	70-99	mg/dl
Glucose, Fasting	Adult, impaired	100-125	mg/dl
Glucose, Fasting	Adult, Abnormal	>125	mg/dl
Glucose, Fasting	Newborn to 3 months	41-115	mg/dl
Glucose, Fasting	3-6 months	50-115	mg/dl
Glucose, Urine	Timed	<500	mg/24 hr
Glucose, Urine	Random, single sample	1-15	mg/dl
Haptoglobin		30-200	mg/dl
HCG, Human Chorionic Gonadotr.	Males	<5	mIU/ml
HCG, Human Chorionic Gonadotr.	Females:		
HCG, Human Chorionic Gonadotr.	Non Pregnant, Pre Menopause	<5	mIU/ml
HCG, Human Chorionic Gonadotr.	Post Menopause	<8	mIU/ml

Test Name	Range Type	Reference Range	Units
HCG, Human Chorionic Gonadotr.	Pregnant:		mIU/ml
HCG, Human Chorionic Gonadotr.	Full weeks beginning with LMP		mIU/ml
HCG, Human Chorionic Gonadotr.	3	18	mIU/ml
HCG, Human Chorionic Gonadotr.	4	141	mIU/ml
HCG, Human Chorionic Gonadotr.	5	1398	mIU/ml
HCG, Human Chorionic Gonadotr.	6	3339	mIU/ml
HCG, Human Chorionic Gonadotr.	7	39759	mIU/ml
HCG, Human Chorionic Gonadotr.	8	90084	mIU/ml
HCG, Human Chorionic Gonadotr.	10	85172	mIU/ml
HCG, Human Chorionic Gonadotr.	12	66676	mIU/ml
HCG, Human Chorionic Gonadotr.	14	34440	mIU/ml
HCG, Human Chorionic Gonadotr.	16	23930	mIU/ml
HCG, Human Chorionic Gonadotr.	18	19817	mIU/ml
HDL Cholesterol	Suggests Increased Risk	< 40	mg/dl
HDL Cholesterol	Acceptable	40-59	mg/dl
HDL Cholesterol	Suggests Decreased Risk	>60	mg/dl
Hemoglobin A1C, glyco hb		4.4-5.6	percent
Hemoglobin Electrophoresis	Hgb A1 (adult)	96.0-98.5	percent
Hemoglobin Electrophoresis	Hgb A2 (adult)	1.4-5.0	percent
IGA, Immunoglobulin A	Adult	69-309	mg/dl
IGA, Immunoglobulin A	Newborns	1-4	mg/dl
IGA, Immunoglobulin A	1-6 months	1-83	mg/dl
IGA, Immunoglobulin A	7-12 months	11-89	mg/dl
IGA, Immunoglobulin A	1-3 years	13-157	mg/dl
IGA, Immunoglobulin A	4-5 years	24-152	mg/dl
IGA, Immunoglobulin A	6-8 years	32-200	mg/dl
IGA, Immunoglobulin A	9-10 years	43-234	mg/dl
IGG, Immunoglobulin G	Adult	613-1400	mg/dl
IGG, Immunoglobulin G	Newborns	611-1541	mg/dl
IGG, Immunoglobulin G	1-6 months	165-781	mg/dl
IGG, Immunoglobulin G	7-12 months	208-1026	mg/dl
IGG, Immunoglobulin G	1-3 years	331-1090	mg/dl
IGG, Immunoglobulin G	4-5 years	444-1187	mg/dl
IGG, Immunoglobulin G	6-8 years	608-1229	mg/dl
IGG, Immunoglobulin G	9-10 years	583-1509	mg/dl
IGM, Immunoglobulin M	Adult	53-334	mg/dl
IGM, Immunoglobulin M	Newborns	6-25	mg/dl
IGM, Immunoglobulin M	1-6 months	19-103	mg/dl
IGM, Immunoglobulin M	7-12 months	32-132	mg/dl
IGM, Immunoglobulin M	1-3 years	41-190	mg/dl
IGM, Immunoglobulin M	4-5 years	41-186	mg/dl
IGM, Immunoglobulin M	6-8 years	46-197	mg/dl
IGM, Immunoglobulin M	9-10 years	49-230	mg/dl
Immuno Fixation Electrophoresis	Contact Lab for details		
Insulin		0-22.7	uU/ml
Iron	Male	80-160	ug/dl
Iron	Female	60-135	ug/dl
Lactate (Lactate)		0.7-2.5	mmol/L
LDH, Lactate Dehydrogenase	Adult	94-250	U/L
LDH, Lactate Dehydrogenase	Infant, 0-4 day	290-775	U/L
LDH, Lactate Dehydrogenase	5-10 day	545-2000	U/L

Test Name	Range Type	Reference Range	Units
LDH, Lactate Dehydrogenase	11 day - 24 month	180-430	U/L
LDL Cholesterol, Measured	Optimal Level	<100	mg/dl
LDL Cholesterol, Measured	Near Optimal	100-129	mg/dl
LDL Cholesterol, Measured	Borderline High	130-159	mg/dl
LDL Cholesterol, Measured	High	160-189	mg/dl
LDL Cholesterol, Measured	Very High	>190	mg/dl
Lipase		16-63	U/L
Lithium	Therapeutic	0.6-1.2	mmol/L
Luteinizing Hormone	Men	1.7-8.6	mIU/ml
Luteinizing Hormone	Women: Follicular Phase	2.4-12.6	mIU/ml
Luteinizing Hormone	Mid Cycle Peak	14.0-95.6	mIU/ml
Luteinizing Hormone	Luteal Phase	1.0-11.4	mIU/ml
Luteinizing Hormone	Post Menopause	7.7-58.5	mIU/ml
Magnesium		1.7-2.8	mg/dl
Magnesium, Urine	Timed	1-24	mg/24 hr
Methemoglobin		0-2.0	percent
Methotrexate	Post-Dost (up to 24 hours)	≤5.00	umol/l
Methotrexate	Post-Dost (up to 48 hours)	≤0.50	umol/l
Methotrexate	Post-Dost (up to 72 hours)	≤0.05	umol/l
(micro) Albumin/Creatinine Ratio	Normal	<30	mg/g
(micro) Albumin/Creatinine Ratio	Moderately Elevated	30-300	mg/g
(micro) Albumin/Creatinine Ratio	Severely Elevated	>300	mg/g
O2 Saturation, Arterial		95-99	percent
Oxyhemoglobin, Arterial		94-98	percent
Oxyhemoglobin, Venous		40-70	percent
Osmolality, Serum		275-295	mOSM/kg
Osmolality, Urine		300-1100	mOSM/kg
Parathyroid Hormone, Intact		15.0-65.0	pg/ml
pCO2, Arterial		35-45	mmHG
pCO2, Venous		41-51	mmHG
pH, Arterial Blood		7.35-7.45	ph Units
ph, Venous		7.32-7.42	ph Units
Phenobarbital	Therapeutic	15.0-40.0	ug/ml
Phosphorus		2.7-4.5	mg/dl
Phosphorus, Urine	Timed	900-1300	mg/24 hr
pO2, Arterial		80-90	mmHG
pO2, Mixed Venous		25-40	mmHG
Potassium		3.5-5.3	mmol/L
Potassium, Urine	Timed	0-80	mmol/24 hr
Prealbumin		18-45	mg/dl
Pregnancy Test	Negative	HCG = <5	mIU/ml
Pregnancy Test	Borderline-repeat in 48 hrs	HCG = 11-25	mIU/ml
Pregnancy Test	Borderline, repeat in 1 week	HCG = 5-10	mIU/ml
Pregnancy Test	Positive	>25	mIU/ml
Procalcitonin		<0.50	ng/ml
Progesterone	Men	0.0-0.1	mIU/ml
Progesterone	Women: Follicular Phase	0.1-0.9	mIU/ml
Progesterone	Ovulatio Phase	0.1-12.0	mIU/ml
Progesterone	Luteal Phase	1.8-23.9	mIU/ml
Progesterone	Post Menopause	0.0-0.1	mIU/ml
Progesterone	Pregnant, 1st trimester	11-44	mIU/ml

Test Name	Range Type	Reference Range	Units
Progesterone	Pregnant, 2nd trimester	25-83	mIU/ml
Progesterone	Pregnant, 3rd trimester	59-214	mIU/ml
Prolactin	Men	4.0-15.2	ng/ml
Prolactin	Women	4.8-23.3	ng/ml
Prostate Specific Antigen, PSA	<40 yr	0-1.40	ng/ml
Prostate Specific Antigen, PSA	40-50 yr	0.00-2.00	ng/ml
Prostate Specific Antigen, PSA	50-60 yr	0.00-3.10	ng/ml
Prostate Specific Antigen, PSA	60-70 yr	0.00-4.10	ng/ml
Prostate Specific Antigen, PSA	>70 yr	0.00-4.40	ng/ml
Protein Electrophoresis	Contact Lab for details		
Protein, Urine	Timed	<150	mg/24 hr
Rheumatoid Factor		<14	IU/ml
Salicylate	Therapeutic	5.0-29.9	mg/dl
Sodium		135-145	mmol/L
Sodium, Urine	Timed	75-200	mmol/24 hr
Spinal Fluid/CSF Lactic Acid	Neonates	1.1-6.7	mmol/L
Spinal Fluid/CSF Lactic Acid	3-10 days	1.1-4.4	mmol/L
Spinal Fluid/CSF Lactic Acid	>10 days	1.1-2.8	mmol/L
Spinal Fluid/CSF Lactic Acid	Adults	1.1-2.4	mmol/L
Spinal Fluid/CSF Glucose		50-75	mg/dl
Spinal Fluid/CSF Protein		15-45	mg/dl
Sweat Chloride	Normal	0-29	mmol/L
Sweat Chloride	Borderline	30-59	mmol/L
Sweat Chloride	Abnormal	≥60	mmol/L
Tegretol/Carbamazepine	Therapeutic	4.0-12.0	ug/ml
Testosterone	Men, 18-49 yrs	249 - 836	ng/dl
Testosterone	Men, ≥ 50 yrs	193 - 740	ng/dl
Testosterone	Women, 18-49 yrs	8.4 - 48.1	ng/dl
Testosterone	Women, ≥ 50 yrs	2.9 - 40.8	ng/dl
Testosterone	Children: See tanner stage		
Theophylline	Therapeutic	10.0-20.0	ug/ml
Thyroid Stimulating Hormone	Children, 0-1 yr	1.36-8.80	mIU/ml
Thyroid Stimulating Hormone	Children, 1-6 yrs	0.85-6.50	mIU/ml
Thyroid Stimulating Hormone	Children >6 yr and Adult	0.27-4.20	mIU/ml
Total Iron Binding Capacity (TIBC)		254-457	ug/dl
Total Protein	Newborn	4.6-7.0	g/dl
Total Protein	1 week to 7 months	4.4-7.6	g/dl
Total Protein	7 months - 1 year	5.1-7.3	g/dl
Total Protein	1-2 years	5.6-7.5	g/dl
Total Protein	3 – 18 years	6.0-8.0	g/dl
Total Protein	Adults (ambulatory)	6.4-8.3	g/dl
Transferrin		200-360	mg/dl
Transferrin (Iron) Saturation	Male	20-55	percent
Transferrin (Iron) Saturation	Female	15-50	percent
Triglyceride		<150	mg/dl
Troponin-T (High Sensitivity)	Male	<22	ng/L
Troponin-T (High Sensitivity)	Female	<14	ng/L
Urea Nitrogen, Urine	Timed	10-20	g/24 hrs
Uric Acid		2.5-8.0	mg/dl
Urine Drug Screen Tests:			
Amphetamine/Methamphetamine		NEGATIVE	

Test Name	Range Type	Reference Range	Units
Barbiturate		NEGATIVE	
Benzodiazepine		NEGATIVE	
Buprenorphine		NEGATIVE	
Cannabinoid (THC)		NEGATIVE	
Cocaine		NEGATIVE	
Ethanol		NEGATIVE	
Fentanyl		NEGATIVE	
MDMA (Ecstasy)		NEGATIVE	
Opiate		NEGATIVE	
Oxycodone		NEGATIVE	
PCP		NEGATIVE	
TCA (Tricyclics)		NEGATIVE	
Uric Acid		2.5-8.0	mg/dl
Uric Acid, Urine	Timed	250-750	mg/24 hr
Vitamin B12		232-1245	pg/ml
Vitamin D	Deficient	<10	ng/ml
Vitamin D	Insufficient	10-29	ng/ml
Vitamin D	Sufficient	30-100	ng/ml
Vitamin D	Potential Intoxication	>100	ng/ml