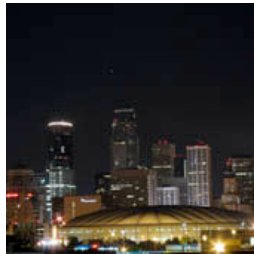




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The Minneapolis skyline at night.

Normal Lab Values (Reference Only)

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Blood Gases

Bicarbonate (HCO_3^-)		Partial Pressure of Carbon Dioxide (pCO_2)	
Normal Value:	22-26 mEq/L	Normal Value:	35-45 mmHg
Blood pH		Partial Pressure of Oxygen (pO_2)	
Normal Value:	7.34-7.44	Normal Value:	75-100 mmHg

Cardiac Enzymes

Creatine Kinase Index (CK-Index)		Total Creatine Kinase (Total CK)	
Normal Value:	0-3	Normal Value:	38-120 ng/ml
Creatine Kinase-MB (CK-MB)		Troponin	
Normal Value:	0-3 ng/ml	Normal Value:	<0.4 ng/ml

Blood Chemistry

Alanine Aminotransferase (ALT)		Bilirubin		Lipase			
Normal Value:	7-56 U/L	Normal Value:		Normal Value:	7-60 U/L		
Albumin		<ul style="list-style-type: none"> ● Direct: <0.3 mg/dl ● Total: 0.2-1.3 mg/dl 		Potassium (K^+)			
Normal Value:	3.5-4.8 U/L			Normal Value:	3.6-5.0 mEq/L		
Alkaline Phosphatase (ALP)		Calcium (Ca^{2+})		Sodium (Na^+)			
Normal Value:	38-126 U/L	Normal Value:	8.9-10.4 mg/dl		Normal Value:	137-145 mEq/L	
Amylase		Chloride (Cl^-)		Total Protein			
Normal Value:	30-110 U/L	Normal Value:	98-110 mEq/L		Normal Value:	6.3-8.2 gm/dl	
Anti-streptolysin O Titer (ASO)		Cholesterol		Triglycerides			
Normal Value:		Normal Value:	120-200 mg/dl		Normal Value:	50-250 mg/dl	
Adult:	<125	Creatinine (Cre)		Urea Nitrogen (BUN)			
Child:	<250	Normal Value:	0.5-1.4 mg/dl		Normal Value:	7-21 mg/dl	
Aspartate Aminotransferase (AST)		Gamma GT					
Normal Value:	5-35 U/L						

Bicarbonate (HCO_3^-)	
Normal Value:	22-26 mEq/L

Normal Value:	8-78 U/L
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Glucose	
Normal Value:	65-110 mg/dL

Uric Acid	
Normal Value:	3.5-8.5 mg/dl

Cerebral Spinal Fluid

CSF Glucose	
Normal Value:	50-80 ng/dl

CSF RBCs	
Normal Value:	0/?l

CSF Protein	
Normal Value:	15-45 mg/dl

CSF WBCs	
Normal Value:	0-3/?l

Endocrine

17-Hydroxycorticosteroid (17-OHCS)	
Normal Value:	<4 mg/day

Prolactin (PRL)	
Normal Value:	0-14 ng/ml

Adrenocorticotrophic Hormone (ACTH)	
Normal Value:	20-100 pg/ml

Serum Alpha-Fetoprotein (AFP)	
Normal Value:	0-44 ng/ml

Hematology

CD4+	
Normal Value:	31-63%
	Absolute: 416-1751/?l

Partial Thromboplastin Time (PTT)	
Normal Value:	18-28 seconds

Red Cell Distribution Width (RDW)	
Normal Value:	
	<ul style="list-style-type: none"> ● Coefficient of variation: 11.5-14.5% ● Standard deviation: 35-47 fL

Fibrinogen	
Normal Value:	170-420 mg/dl

Platelet Count (Pit)	
Normal Value:	140-450x10 ³ /?l

Hematocrit (Hct)	
Normal Value:	
Male:	40-52%
Female:	37-46%
Child:	31-43%

Prothrombin Time (PT)	
Normal Value:	12-14 seconds

Reticulocyte	
Normal Value:	
Adult:	0.5-1.5%
Infant:	0.5-3.1%
Newborn:	1.1-4.5%

Hemoglobin (Hg, Hgb)	
Normal Value:	
Male:	13.2-16.2 gm/dL
Female:	12.0-15.2 gm/dL

RBC Mean Cell Volume (MCV)	
Normal Value:	
Male:	82-102 fL
Female:	78-101 fL

White Blood Cell Count (WBC)	
Normal Value:	4.1-10.9x10 ³ /?l
	<ul style="list-style-type: none"> ● Polymorphonuclear (PMN): 35-80% ● Immature Polys (Bands): 0-10% ● Lymphocytes (Lymp): 20-50% ● Monocytes (Mono): 2-12% ● Eosinophils (Eos): 0-7% ● Basophils (Bas): 0-2%

Mean Cell Hemoglobin Concentration (MCHC)	
Normal Value:	31-35 gm/dl

Red Blood Cell Count (RBC)	
Normal Value:	
Male:	4.3-6.2x10 ⁶ /?l
Female:	3.8-5.5x10 ⁶ /?l
Child:	3.8-5.5x10 ⁶ /?l

Iron Studies

Ferritin	
Normal Value:	
Male:	18-250 ng/ml
Female:	12-160 ng/ml

Total Serum Iron (TSI)	
Normal Value:	
Male:	76-198 ?g/dl
Female:	26-170 ?g/dl

Total Iron-Binding Capacity (TIBC)		Transferrin	
Normal Value:	262-474 µg/dl	Normal Value:	204-360 mg/dl

Thyroid

Free Thyroxine (T4 Free)		Thyroxine-binding Globulin (TBG)		Total Triiodothyronine (T3 Total)	
Normal Value:	0.8-1.5 ng/dl	Normal Value:	12-30 mg/L	Normal Value:	60-181 ng/ml
Thyroid Stimulating Hormone (TSH)		Total Thyroxine (T4 Total)			
Normal Value:	0.4-4.5 U/ml	Normal Value:	5.5-12.3 ng/ml		

Urinalysis

Urine Bilirubin		Urine Micro		Urine pH	
Normal Value:	Negative	Normal Value:		Normal Value:	5-7
Urine Blood			<ul style="list-style-type: none"> ● RBCs: 0-2/HPF ● WBCs: 0-2/HPF ● RBC Casts: 0/HPF 	Urobilinogen	
Normal Value:	Negative			Normal Value:	0.2-1.0 Ehr U/dl
Urine Ketone		Urine Nitrite			
Normal Value:	Negative	Normal Value:	Negative		
Urine Leukocytes		Urine Protein			
Normal Value:	Negative	Normal Value:	Negative-Trace		
		Specific Gravity			
		Normal Value:	1.002-1.030		