

Common Laboratory Values Cheat Sheet

Diagnostic tests are crucial in any aspect of clinical practice since they assist clinicians in establishing and determining the particular condition of the patient. Nurses are often tasked of patient preparation and specimen collection during these diagnostic procedures. It is of utmost importance that nurses are knowledgeable about the different procedures and their values and results to make informed clinical decisions. To assist nurses, here are the common laboratory values listed in an organized and easy-to-understand table.

Value	Normal Range	Unit	Value	Normal Range	Unit																																																																																																															
COMPLETE BLOOD COUNT																																																																																																																				
Red Blood Cell (RBC)	M: 4.5—5.5 F: 4.0—4.9	x10 ⁶ /mL	Creatine phosphokinase (CPK)	21—198	units/L																																																																																																															
White Blood Cell (WBC)	4,500—10,000	cells/mcL	Creatinine Clearance (CrCl)	F: 85—132 M: 90—138	mL/min																																																																																																															
Platelets	100,000—450,000	cells/mcL	Albumin	3.4—5.0	g/dL																																																																																																															
Hemoglobin (Hgb)	M: 13.5—16.5 F: 12.0—15.0 Pregnant: 10—15	g/dL	Bilirubin	<1.0	mg/dL																																																																																																															
Hematocrit (Hct)	M: 41—50% F: 36—44%		Uric Acid	3.5—7.5	mg/dL																																																																																																															
Mean Corpuscular Volume (MCV)	80—100	fL	COAGULATION STUDIES																																																																																																																	
DIFFERENTIAL COUNT																																																																																																																				
Neutrophils	54—62%		Prothrombin Time (PT)	11—14	seconds																																																																																																															
Eosinophils	1—3%		Partial Thromboplastin Time (PTT)	25—35	seconds																																																																																																															
Basophils	0—0.75%		International Normalized Ratio (INR)	0.8—1.2																																																																																																																
Lymphocytes	25—33%		Activated Partial Thromboplastin Time (aPTT)	1.5—2.5																																																																																																																
Monocytes	3—7%		Fibrinogen	203—377	mg/dL																																																																																																															
SERUM ELECTROLYTES																																																																																																																				
Sodium (Na ⁺)	135—145	mEq/L	Bleeding time	1—6	mins																																																																																																															
Potassium (K ⁺)	3.5—5.5	mEq/L	LIPOPROTEINS AND TRIGLYCERIDES																																																																																																																	
Chloride (Cl ⁻)	95—105	mEq/L	Calcium	8.5—10.9	mEq/L	Total Cholesterol	Ideal: below 200 Borderline: 200—240 High: above 240	mg/dL	Calcium, ionized	2.24—2.46	mEq/L	Low Density Lipoprotein (LDL)	<70	mg/dL	Magnesium (Mg)	1.5—2.5	mEq/L	High Density Lipoprotein (HDL)	<60	mg/dL	Phosphorus (P)	2.5—4.5	mEq/L	Triglycerides	Normal: below 150 Borderline high: 150—199 High: 200—499 Very high: above 500	mg/dL	URINALYSIS						Volume	1,000—2,000	mL/day	SGOT (AST)	<35	IU/L		30	mL/hour	SGPT (ALT)	<35	IU/L	Specific Gravity	1.010—1.020		CARDIAC MARKERS						pH	4.5—8		Troponin (CTN-1 or CTN-T)	Normal I: 0.03 Critical level I: above 1.5 Critical level T: 0.2	ng/L	Casts	1—2	per high power field	C-reactive protein	Below 0.8	mg/dL	Glucose	none		CD40 Ligand	1.51—5.35	mg/L	Protein	none		Creatinine Kinase (CK-MB)	0—3	mcg/L	Uric Acid	F: 3.5—7.2 M: 2.6—6.0	mg/dL	ARTERIAL BLOOD GAS						CHEMISTRY VALUES						Glucose	Adults: 70—110	mg/dL	pH	7.35—7.45		Blood Urea Nitrogen (BUN)	Adults: 7—18 Child: 5—20 Infant: 5—15	mg/dL	Partial Pressure of CO ₂ (pCO ₂)	35—45	mmHg	Serum Creatinine	0.6—1.35	mg/dL	Partial Pressure of O ₂ (pO ₂)	80—100	mmHg				Bicarbonate (HCO ₃)	22—26	mEq/L
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ARTERIAL BLOOD GAS (cont.)		
Base Excess (BE)	-2—+2	mEq/L
Oxygen Saturation (SaO ₂)	95—100%	
THYROID FUNCTION STUDIES		
Thyroid-Stimulating Hormone (TSH)	Adults: 0.2—5.4 Neonate: 3—20	mU/L
Thyroxine (Total T ₄)	Adult: 5.4—11.5 Child: 6.4—13.3	mcg/dL
Free Thyroxine (Total T ₄ F ₄)	Adult: 0.7—2.0	ng/dL
Thyroid-Binding Globulin (TBG)	Male: 15—30 Female: 11.5—32.2 Pregnancy 1st Trimester: 19.8—64.7 2nd Trimester: 41.4—63.9 3rd Trimester: 31.0—73.6	mcg/dL
Triiodothyronine (Total T ₃)	75—200	ng/dL
Free Triiodothyronine (FT ₃)	260—480	pg/dL
Thyroglobulin (Tg) Antibody	5—25	ng/mL

TUMOR MARKERS		
CA 19-9 Tumor Markers	<37	U/mL
CA 27.29	Above 38	U/mL
CA 15.3	Above 22	U/mL
CA 125	0—35	U/mL
Carcinoembryonic Antigen (CEA)	Above 5	ng/mL
THERAPEUTIC SERUM DRUG LEVELS		
Carbamazepine (Tegretol)	4—10	mcg/mL
Digoxin (Lanoxin)	0.8—2.0	ng/mL
Lithium (Eskalith)	0.8—1.5	mEq/L
Phenobarbital (Solfoton)	15—40	mcg/mL
Theophylline (Aminophylline)	10—20	mcg/mL
Valproic Acid (Depakene)	50—100	mcg/mL