



AMERICAN BOARD OF EMERGENCY MEDICINE

Normal Laboratory Values for Examinations

<u>LABS</u>	<u>METRIC VALUES</u>	<u>S.I. UNIT VALUES</u>
Hematology		
Hematocrit	36-47% (female) 41-51% (male)	0.36-0.47 (female) 0.41-0.51 (male)
Hemoglobin	12-16 g/dL (female) 14-17 g/dL (male)	120-160 g/L (female) 140-170 g/L (male)
Thrombocytes (platelets)	150-450 x 10 ³ /mm ³	150-450 x 10 ⁹ /L
White blood cells	3,200-9,800/mm ³	3.2-9.8 x10 ⁹ /L
Clinical Chemistry		
Alanine aminotransferase (ALT/SGPT)	0-35 Units/L	0-0.58 pkat/L
Alkaline phosphatase	36-92 Units/L	0.5-1.5 microkat/L
Ammonia	10-80 mcg/dL	12-55 micromoles/L
Amylase	0-130 Units/L	0-2.17 microkat/L
Aspartate aminotransferase (AST/SGOT)	0-35 Units/L	0-0.58 pkat/L
Bilirubin	0-0.3 mg/dL (direct) 0.3-1.2 mg/dL (total)	0-5.1 micromoles/L (direct) 5.1-20.5 micromoles/L (total)
Blood urea nitrogen (BUN)	8-20 mg/dL	2.9-7.1 mmol/L
B-type natriuretic peptide (BNP)	<100 pg/mL	<100 ng/L
Calcium	9-10.5 mg/dL	2.2-2.6 mmol/L
Carbon dioxide	23-28 mEq/L	23-28 mmol/L
Chloride	98-106 mEq/L	98-106 mmol/L
Creatine phosphokinase (CPK)	30-170 Units/L	0.5-2.83 microkat/L
Creatine phosphokinase MB fraction (CPK-MB)	0-6% of total CPK	0-0.06 fraction of total CPK
Creatinine	0.7-1.3 mg/dL	61.9-115 micromoles/L
D-dimer	≤300 ng/mL	≤300 mcg/L
Erythrocyte Sedimentation Rate (ESR)	0-29 mm/hr (female) 0-22 mm/hr (male)	
Glucose	70-105 mg/dL	3.9-5.8 mmol/L
Lactate	0.4-2.3 mEq/L	0.4-2.3 mmol/L
Lactate dehydrogenase (LDH)	60-160 Units/L	1-1.67 microkat/L
Lipase	<95 Units/L	<1.58 microkat/L
Magnesium	1.5-2.4 mg/dL	0.62-0.99 mmol/L
Osmolality	275-295 mOsm/kg H ₂ O	275-295 mmol/kg H ₂ O
Phosphorus	3.0-4.5 mg/dL	0.97-1.45 mmol/L
Potassium	3.5-5.0 mEq/L	3.5-5.0 mmol/L
Prothrombin Time (PT)	11-13 seconds	11-13 seconds
International normalized ratio (INR)	0.8-1.2	0.8-1.2
Partial thromboplastin time (PTT)	25-35 seconds	25-35 seconds
Sodium	136-145 mEq/L	136-145 mmol/L
Troponin I	<0.1 ng/mL	<0.1 mcg/L
Uric Acid	2.5-8 mg/dL	0.15-0.47 mmol/L
Arterial Blood Gases		
pH	7.37 - 7.44	7.37 - 7.44
pCO ₂	35 - 45 mm Hg	4.67 - 6.00 kPa
pO ₂	80 - 100 mm Hg	10.67 – 13.33 kPa
Bicarbonate (HCO ₃)	22 - 26 mEq/L	22 - 26 mmol/L
O ₂ saturation	>95%	>95%