



Normal Lab Values



Normal Lab Values



Urine

Minimum Volume 0.5-1.0 mL/kg/hr
 Specific Gravity 1.002- 1.030
 Osmolality 50-1400 mOsmol/kg
 Creatinine, M 14-26, F 11-20 mg/kg/day
 Creatinine Clearance
 M 90-136 mL/min/1.73m²
 F 80-125 mL/min/1.73m²
 Urea Nitrogen 12-20 g/day

Sodium 40-220mEq/day
 Potassium 25-125 mEq/day
 Calcium 100-300 mg/day
 Phosphate 0.4-1.3 g/day
 Uric Acid 250-750 mg/day

Amylase 1-17 U/hr

Glucose <0.5 g/day
 Albumin 10-100 mg/day
 Protein 10-150 mg/day

5-HIAA 2-6 mg/day
 17-Ketosteroids
 M 8-22 mg/day
 F 6-15 mg/day
 17- Ketogenic Steroids
 M 5-23 mg/day
 F 3-15 mg/day
 17- Hydroxycorticosteroids
 M 3-10 mg/day
 F 2-8 mg/day
 Homovanillic Acid 1.4-8.8 mg/day
 Metanephrine 0.05-1.2 µg/mg cre.

Toxicology

Acetaminophen >200 µg/mL
 COHgb > 20% saturation
 Ethanol (mg/dL)
 >100 intoxicated, ataxic, slurred speech
 >200 lethargic, stuporous, vomiting
 >300 coma
 >500 respiratory depression, death
 Ethylene Glycol >20 mg/dL
 Lead >100 µg/dL
 Methanol >200 mg/L
 Salicylate >300 µg/mL (trough)

Cerebrospinal Fluid

Pressure 70-180 mm CSF supine
 WBC 0-5 mononuclear cells/ µL
 Protein 15-45 mg/dL
 Glucose 40-70 mg/ dL

Synovial Fluid

WBC <200 /µL (<25% neutrophils)
 Trauma, OA, SLE <3000 WBC/ µL
 Gout, RA >4000 WBC/ µL
 Septic >60000 WBC/ µL
 Protein ≤ 3.0g/ dL
 Glucose > 40mg/dL
 Uric Acid <8.0 mg/ dL
 LDH ≤ Serum LDH

Endocrinology

Aldosterone
 Supine 3-10 ng/ dL
 Upright 5-30 ng/dL
 Cortisol
 0800h 6-23 µg/dL
 1600h 3-15 µg/dL
 2200h ≤ 50% of 0800h value
 Estrogen
 Follicular 60-200 pg/dL
 Luteal 160-400 pg/dL
 Menopausal ≤130 pg/ dL
 Gastrin <100 pg/mL
 Growth Hormone
 M <2 ng/mL, >60yo < 10 ng/mL
 F <10 ng/mL, >60yo < 14 ng/mL
 TBG 15-34 µg/ mL

T₄, total 5-12 µg/ dL
 T₄, free 0.8-2.3 ng/dL
 T₃, total 100-200 ng/dL
 TSH < 10 µU/ mL
 >60yo M 2-7.3 µU/ mL
 F 2-16.8 µU/ mL

FSH
 Follicular 1-9 mU/ mL
 Ovulation 6-26 mU/ mL
 Luteal 1-9 mU/ mL
 Menopausal 30-118 mU/ mL

LH
 Follicular 1-12 mU/ mL
 Midcycle 16-104 mU/ mL
 Luteal 1-12 mU/ mL
 Menopausal 16-66 mU/ mL

Progesterone Follicular 0.15-0.7
 Luteal 2.0-25 ng/ mL
 Prolactin < 20 ng/ mL
 PTH 10-65 pg/ mL
 Testosterone, M
 Total 300-1000 ng/ dL
 Free 52-280 pg/ mL

Hematology

Neutrophils 57-67%
 Segs 54-62%
 Bands 3-5%
 Lymphocytes 23-33%
 Monocytes 3-7%
 Eosinophils 1-3%
 Basophils 0-1%

Hemoglobin
 M 13.5-17.5 g/ dL
 F 12-16 g/dL

WBC
 4.5-11x10³
 per µL

Hematocrit
 M 39 - 49%
 F 35 - 45%

Platelets
 150- 450 x10³
 per µL

RBC
 M 4.3-5.7x10⁶/µL
 F 3.8-5.1 x10⁶/µL

MCV 80-100 fL
 MCH 26-34 pg/ cell
 MCHC 31-37% Hgb/ cell
 Reticulocyte Count 0.5- 1.5%
 Hemoglobin A_{1c} 5.0- 7.5%
 Haptoglobin 26-185 mg/ dL

PT 11-15 sec
 aPTT 20-35 sec
 Bleeding Time 2-7 min
 Thrombin Time 6.3-11.1 sec
 Fibrinogen 200-400 mg/ dL
 FDP < 10µg/ mL
 ESR
 M <15 mm/hr
 F < 20 mm/hr

Chemistries

Anion Gap 7-16 mEq/L
 Osmolality 275-295 mOsm/ kg

Sodium 135-145 mEq/ L	Chloride 98-106 mEq/L	BUN 7- 18 mg/ dL	Glucose 70- 115 mg/dL
Potassium 3.5- 5.1 mEq/L	Bicarbonate 22- 29 mEq/ L	Creatinine 0.6- 1.2 mg/dL	

Calcium
 Total 8.4- 10.2 mg/dL
 Ionized 4.65- 5.28 mg/dL
 Phosphate 2.7 -4.5 mg/ dL
 >60yo M 2.3-3.7 mg/dL
 F 2.8-4.1 mg/ dL
 Magnesium 1.3- 2.1 mEq/ L

Alkaline Phosphate
 M 38- 126 U/L
 F 70- 230 U/L
 LDH 90- 190 U/L
 SGOT/ AST 7 -40 U/L
 SGTP/ ALT 7- 40 U/L
 GGT
 M 9- 50 U/L
 F 8- 40 U/L

Protein, total 6 -8 g/dL
 Albumin 3.5- 5.5 g/dL
 α₁ Fetoprotein <10 ng/mL
 Bilirubin, Total 0.2- 1.0 mg/dL
 Conjugated 0-0.2 mg/dL

Lipase 10 -140 U/L,
 >60yo 18- 180 U/L
 Amylase 25 -125 U/L
 C- peptide 0.7- 1.89 ng/ mL
 Total Cholesterol <200 mg/dL
 LDL <130 mg/dL
 HDL, M >29 mg/dL
 F >35 mg/dL
 Triglycerides, M 40- 160 mg/dL
 F 35- 135 mg/dL

Lactate, Venous 5- 20 mg/dL
 Uric Acid: M 3.5- 7.2, F 2.6- 6 mg/dL
 Ammonia Nitrogen 10-50 µmol/L
 Acid Phosphatase < 0.8 U/L

CPK
 M 38- 174 U/L
 F 26- 140 U/L
 MB < 5%
 Iron M 65- 175 µg/ dL
 F 50- 170 µg/ dL
 TIBC 250- 450 µg/ dL
 Iron Saturation
 M 20 -50%
 F 15- 50%
 Ferritin, M 20 -250 ng/mL
 F 10- 120 ng/mL
 Vit B₁₂ 100- 700 pg/mL
 Folate 3- 16 ng/mL
 Copper: M 70-140, F 80- 155 µg/dL
 Zinc 70- 150 µg/dL
 PSA < 4.0 ng/mL
 CEA <2.5, smoker < 5 ng/ mL
 CA-125 <35 U/mL

Arterial Blood Gases

pH 7.35- 7.45	PaCO ₂ 35- 45 mm Hg	HCO ₃ 21-27 mEq/L	Oxygen Saturation 95- 98%	PaO ₂ 80- 100 mm Hg	Base Excess ± 2 mEq/ L
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Source: American Medical Association-
www.ama-assn.org

Note: The values listed are for adults.



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