

NOTE: Critical Values: Values are for all methodologies unless otherwise stated

CHEMISTRY			
ANALYTE	AGE/SEX	CRITICAL VALUE	UNITS
Sodium	Any age/sex	≤125 ≥160	mmol/L
Potassium	<1 week	<2.5 >6.0	mmol/L
	>1 week	<3.0 >6.0	
Potassium - ISTAT (POCT)	Any age/sex	<3.0 >6.0	mmol/L
Chloride	Any age/sex	≤80 ≥120	mmol/L
CO₂	Any age/sex	≤10 ≥40	mmol/L
Anion Gap	Any age/sex	≥30	mmol/L
Glucose	<2 days	≤35 ≥200	mg/dL
	2 days to 1 month	≤40 ≥200	
	1 month to 1 year	≤40 ≥300	
	1 year to 17 years	≤55 ≥300	
	>17 years	≤55 ≥450	
Glucose, CSF	Any age/sex	≤40	mg/dL
Glucose (GDM) GDM Glucose Tolerance GDM Glucose Tolerance 1hr GDM Glucose Tolerance 2hrs GDM Glucose Tolerance 3hrs	>1 year	<50 >300	mg/dL
Total Bilirubin	<24 hours	≥8	mg/dL
	≥24 to <48 hours	≥13	
	≥48 hours to <84 hours	≥17	
	≥84 hours to <30 days	≥15	
Calcium*	Any age/sex	≤6.5 ≥13	mg/dL
Free (ionized) Calcium*	Any age/sex	<0.8 >1.6	mmol/L
Ethanol	Any age/sex	≥300	mg/dL
Iron, Serum	Any age/sex	≥350	ug/dL
Phosphorus	<3 years	≤2.5	mg/dL
	3 years to 12 years	≤2.0	
	>12 years	≤1.5	
Magnesium	Any age/sex	≤1.0 ≥3.5	mg/dL
Ammonia	Any age/sex	>150	umol/L
pH	Any age/sex	<7.20 >7.60	pH units
pCO₂	Any age/sex	≥66	mmHg
pO₂ (arterial)	Any age/sex	≤49.9	mmHg

* Calcium: **mmol/L (SI unit) = 0.25 (conversion factor) x mg/dL (conventional unit).**

CHEMISTRY (cont'd)

ANALYTE	AGE/SEX	CRITICAL VALUE	UNITS
Bicarbonate (Whole Blood)	Any age/sex	≤10 ≥40	mmol/L
CO Hemoglobin	Any age/sex	≥20.1	%
Methemoglobin	Any age/sex	>3	%
Troponin I, High Sensitivity	Male ≥18 years Female ≥18 years	≥35 ≥17	ng/L
Troponin I – ISTAT (POCT)	Any age/sex	>0.1	ng/mL
pH - Arterial & Venous Blood Gases, Cord Blood	Any age/sex	≤7.00	N/A
Base Excess - Arterial & Venous Blood Gases, Cord Blood	Any age/sex	<-10.0 >10.0	mmol/L
Lactic Acid	Any age/sex	≥4.0	mmol/L

HEMATOLOGY

TEST	AGE/SEX	CRITICAL VALUE	UNITS
WBC	Any age/sex	≤0.5 (outpatient only) ≥50	K/mL
Absolute Neutrophil Count	Any age/sex	≤0.5 (outpatient only)	K/mL
Hemoglobin	Any age/sex	≤7.0	g/dL
Hematocrit (PCV)	Any age/sex	≤21.0 ≥65.0	%
Platelet Count	Any age/sex	≤10,000 ≤50,000 (L&D, OB outpatient clinics, Perinatal Diagnostic Center, LPNICU260 & NICU270, LPICN1 & ICN2, Newborn Nursery, and Sequoia SCN) ≤100,000 with 2+ microangiopathic changes	/mL
Slide Review/Diff	Any age/sex	Presence of intracellular organisms Blasts on peripheral smear (1 st time or relapse only)	%
Cell Count, CSF only	Any age/sex	WBC Count >30 (excluding peripheral blood contamination)	/mL
Cell Count, CSF only	Any age/sex	Blast or Tumor cells	
Cell Count and Differential, ALL body fluids except BAL	Any age/sex	Intracellular organisms. (Non-CSF- Blasts and Tumor cells to be called as soon as a provider is available, which for inpatients is immediate, for others called next business day)	
Gram Stain	Any age/sex	Positive	N/A
Blood Parasite	Any age/sex	Any parasite seen	N/A
Urinalysis	Female <18 Years Male <18 Years	Sperm or Trichomonas Trichomonas	N/A
Stool	<18 Years	Sperm	N/A

MICROBIOLOGY

TEST	AGE/SEX	CRITICAL VALUE	UNITS
Any assay: Potential Bioterrorism Agent	Any age/sex	Presence of potential B. anthracis or any BT agent. Bacillus anthracis (Category A) Francisella tularensis (Category A) Yersinia pestis (Category A) Brucella species (Category B)	N/A
Blood Culture	Any age/sex	Any clinically important positive result per protocol	N/A
Stool Pathogen	<18 years	Positive Shiga-like toxin-producing E. coli	N/A
Mycobacterium Tuberculosis PCR Test	Any age/sex	Positive on Tissue or Culture	N/A
Meningitis/Encephalitis, Mold, and Dimorphic Fungi PCR Panels (CSF only)	Any age/sex	Positive for any pathogen	N/A

TOXICOLOGY

Therapeutic Drug Monitoring (TDM) and Immunosuppressive Drugs (ISDs)

DRUG	EPIC Test Code	LPCH Age <18	SHC Age ≥18	UNITS
Acetaminophen	LABACETA	≥150.0	≥200.0	µg/mL
Amikacin	LABAMIPOL LABAMIPRL LABAMIUNL	Peak: ≥40.0 Trough: >10.0 Once Daily: ≥60.0	Peak: ≥40.0 Trough: >10.0	µg/mL
Carbamazepine	LABCZPL	>12.0	≥20.0	µg/mL
Cyclosporine A	LABCYCWBL	≥600	≥500	ng/mL
Digoxin	LABDIGL	>2.0	≥2.5	ng/mL
Gentamicin	LABGNTPOL LABGNTPRL LABGNTUNL	Peak: ≥12.0 Trough: ≥2.0 Once Daily: ≥30.0	Peak: ≥12.0 Trough: ≥2.0 Once Daily: ≥30.0	µg/mL
Lidocaine	LABLIDOL	≥6.0	≥6.0	µg/mL
Lithium	LABLIL	≥1.50	≥2.00	mmol/L
Phenobarbital	LABPB	≥60.0	≥60.0	µg/mL
Phenytoin	LABPHEN	≥30.0	>20.0	µg/mL
Procainamide + NAPA	LABPALL LABPANAPL	Procainamide: >10.0 NAPA: ≥40.0	Procainamide: >10.0 NAPA: ≥40.0	µg/mL
Salicylate	LABSALICY	≥40.0	≥40.0	mg /dL
Sirolimus	LABSIROL	>15.0	≥25.0	ng/mL
Tacrolimus	LABFK506L	>20.0	>20.0	ng/mL
Theophylline	LABTHEOL	>20.0	≥25.0	µg/mL
Tobramycin	LABTOBPOL LABTOBPRL LABTOBUNL	Peak: ≥12.0 Trough: ≥2.0 Once Daily: ≥30.0	Peak: ≥12.0 Trough: ≥2.0 Once Daily: ≥30.0	µg/mL
Valproic acid	LABVPAL	≥125.0	≥150.0	µg/mL
Vancomycin	LABVANPRL	Trough: ≥30.0	Trough: ≥30.0	µg/mL

VIROLOGY

TEST	AGE/SEX	CRITICAL VALUE	UNITS
Any Assay performed on CSF/Brain	Any age/sex	Positive (including virus growth or molecular test)	N/A
Antigen test, culture, serology, or molecular test	Any age/sex	Positive or suspicious for any Pandemic (e.g., Influenza, SARS, novel respiratory virus) or Bioterrorism Agents (Smallpox, Viral hemorrhagic fever agents)	N/A
Measles (rubeola) virus	Any age	Positive (molecular detection)	N/A