

LABORATORY CRITICAL VALUES LIST

CHEMISTRY		
TEST	LOW LIMIT	HIGH LIMIT
Alcohol Level (Ethanol)	N/A	>400 mg/dL
Ammonia	N/A	> 100 mcmol/L
Amylase Level	N/A	> 400 IU/L
Arterial pH	< 7.11	> 7.59
Bilirubin, Total (Pediatric)	N/A	≥15.0 mg/dL
Bilirubin, Total (Adult)	N/A	≥20.0 mg/dL
Calcium	≤ 6.0 mg/dL	≥ 13.0 mg/dL
Carboxyhemoglobin	N/A	≥ 20%
Glucose (< 12 Years)	< 50 mg/dL	> 300 mg/dL
Glucose (> 12 Years)	< 50 mg/dL	> 500 mg/dL
HIV Ag/Ab	N/A	Confirmed Positive
Ionized Calcium	≤ 0.5 mmol/L	≥ 2.0 mmol/L
Lactic Acid	N/A	> 2.0 mmol/L
Lithium Level	N/A	≥ 1.50 mmol/L
Magnesium (<1 month)	< 1.0 mg/dL	> 7.0 mg/dL
Magnesium (>1 month)	< 1.0 mg/dL	> 6.0 mg/dL
Phosphorus	< 1.0 mg/dL	N/A
Potassium (< 1 month)	< 2.4 mmol/L	> 6.4 mmol/L
Potassium (> 1 month)	< 3.0 mmol/L	> 6.0 mmol/L
Protein CSF (0-8 days)	< 40 mg/dL	>120 mg/dL
Protein CSF (>8days-1 month)	< 20 mg/dL	> 80 mg/dL
Protein CSF (>1 month-12 years)	< 15 mg/dL	> 40 mg/dL
Protein CSF (>12 years)	< 8 mg/dL	> 40 mg/dL
Sodium (< 12 years)	< 125 mmol/L	> 150 mmol/L
Sodium (>12 years)	< 126 mmol/L	> 160 mmol/L
Hs Troponin	N/A	≥64 ng/L 2Hour Delta ≥ 10 4Hour Delta ≥ 15 Calls only for first critical level
Must Call but NOT Critical Test		
Fetal fibronectin (FFN)	N/A	Positive
HBsAG	N/A	Positive (Preliminary and confirmation)
Hepatitis C Antibody	N/A	Positive (Preliminary and confirmation)
Therapeutic Drugs/Toxicology		
Acetaminophen	N/A	> 40 mcg/mL
Carbamazepine	N/A	> 15.0 mcg/mL
Digoxin	N/A	> 2.5 ng/mL
Phenytoin	N/A	> 30.0 mcg/mL
Phenobarbital	N/A	> 60.0 mcg/dL
Salicylate	N/A	> 30.0 mg/dL
Theophylline	N/A	> 25.0 mcg/mL
Valproic Acid (Depacote)	N/A	> 200.0 mcg/mL
Vancomycin (Trough)	N/A	> 20.0 mcg/mL

HEMATOLOGY		
TEST	LOW LIMIT	HIGH LIMIT
WBC (x10 ³ /mCL) Birth – Day1 Day 1 – Day 7 >7 Days	<2.5	≥ 32.0
	<2.5	≥ 36.0
	<1.0	≥ 50.0
Absolute Neutrophil Count (x10 ³ /mCL)	< 0.5 Neutropenia	N/A
Hemoglobin g/dL Birth - 30 Days 1 Mo. -2 Months > 2 Months - 14 Years > 14 Years	<12.0	N/A
	<9.0	N/A
	<8.0	N/A
	<7.0	N/A
Platelets (x10 ³ /mCL) Birth – 14 Years >14 Years	< 100	N/A
	< 50	N/A
Blasts on peripheral blood smear	N/A	Any Amount
Blood parasites	N/A	Ring forms seen
Coagulation		
PT-INR	N/A	> 5.0
Partial Thromboplastin Time (seconds)	N/A	> 100.0
Anti-Xa Unfractionated	N/A	≥ 0.8 IU/mL
Anti-Xa Low Molecular Weight	N/A	≥ 1.0 IU/mL
HIT-Ab	N/A	Positive

BLOOD BANK	
TEST	CRITICAL VALUE
Crossmatch after emergency release	Discovery of an incompatibility upon completion of testing
Transfusion Reaction Workup	- Discovery of hemolysis or incompatibility - True positive gram stain or culture of residual blood component
Antibody titer	> 1:8

SURGICAL PATHOLOGY
- Absence of product of conception in uterine content when intrauterine pregnancy is clinically expected - Adipose tissue in endometrial curettage or endoscopic colonic polypectomy - Bacterial or fungi in bone marrow - Bacterial or fungi in CSF cytology - Corrected report affecting patient management - Invasive microorganisms in specimens of immunocompromised patients - Leukocytoclastic vasculitis - Significant disagreement between frozen section and permanent diagnosis - Unexpected diagnosis of malignancy, such as malignancy found in uncommon location or type of specimen, i.e., hernia sac, intervertebral disc - Unexpected organ or tissue in a specimen with clinical significance

MICROBIOLOGY		
TEST	CRITICAL VALUE	PERFORMING LAB
Amniotic Fluid Gram Stain	Positive Smear	WIH
Blood Cultures gram stain	Positive smear	Kent
Cerebrospinal Fluid (CSF) gram stain	Positive smear	Kent
Cryptococcal Antigen test	Positive	Kent
Invasive Group A Strep Culture (Urine, soft tissues, sterile sites)	Positive	WIH
Sterile Body Fluid	Positive	WIH
Must Call or Fax but NOT Critical Test		
TEST	Abnormal Finding	PERFORMING LAB
Staph aureus (MRSA)- Inpatients, implant screens, MRSA	Methicillin-Resistant	WIH, Kent
Staph aureus isolates	Suspected VRSA/VISA	WIH
Enterococcus (VRE)- Inpatients	Vancomycin Resistant	WIH, Kent
ESBL isolate (extended spectrum beta-lactamase)- Inpatients only	Positive	WIH
CRE isolate (carbapenemase-resistant Enterobacteriaceae)- Inpatients	Positive	WIH
Stenotrophomonas maltophilia- Inpatients	Present	WIH
Neisseria meningitidis	Present	WIH
Enteric pathogen culture	Positive	WIH
AFB results (smear and/or culture)	Positive	WIH
GC or Chlamydia PCR or Culture	Positive	WIH
Strep A, Culture	Positive	WIH
Pneumocystis jirovecii	Positive	WIH
Legionella	Positive	WIH
Mycoplasma/Ureaplasma	Positive	WIH
Ova & Parasite results	Positive	WIH
Candida auris isolates	Positive or Suspected	WIH
HSV Culture/PCR (Women of Childbearing Age)	Positive	WIH
Ehrlichia/Anaplasma	Positive	WIH

Note: In accordance with MIC 113.1, the Rhode Island Department of Health will be notified if an Agent of Bioterrorism is isolated.