

VCUHS Pathology Laboratories
Phone: 804-828-7284 Fax: 804-628-8724
Summary Table of Critical Values Updated 3/9/07

Test	Reference Ranges	Test Values <= unless noted	Test Values >= unless noted
BODY FLUIDS			
		Presence of bacteria or yeast after smear confirmation	
		Presence of blasts or neoplastic cells after smear confirmation	
CSF (WBC)	(0-5 cells)		WBC>=200mm ³
CHEMISTRY			
Calcium <7days	6.0-12.0 mg/dL	<6.0 mg/dL	>12.0 mg/dL
8 days-10 years	9.4-10.9 mg/dL	<6.6 mg/dL	>12.0 mg/dL
11 y to adult Male	9.2-10.7 mg/dL	<6.6 mg/dL	>12.0 mg/dL
11 y to adult Female	8.9-10.5 mg/dL	<6.6 mg/dL	>12.0 mg/dL
Glucose Adult	65-100mg/dL (fasting)	<50 mg/dL	>500 mg/dL
1 mo-3 yrs	60-100 mg/dL	<50 mg/dL	>500 mg/dL
<30 days	40-90 mg/dL	<40 mg/dL	>500 mg/dL
Lithium	0.5-1.5 mmol/L	NA	>2.0 mmol/L
Magnesium	1.8-2.4 mg/dL	<1.0 mg/dL	>4.9 mg/dL
Phosphorus	2.5-4.6 mg/dL	<1.3mg/dL	NA
Potassium	3.6-5.1 mmol/L	<2.8 mmol/L	>6.1 mmol/L
<3days	5.0-7.5 mmol/L	<2.8 mmol/L	>7.5 mmol/L
3 days - 3 months	4.0-6.2 mmol/L	<2.8 mmol/L	>6.2 mmol/L
Sodium	135-145 mmol/L	<125 mmol/L	>155 mmol/L
COAGULATION			
Activated partial thromboplastin time (APTT)	25-38 sec		>150 sec
D-Dimer	<0.41 ug/mL FEU		>5.0 ug/mL FEU
Fibrin split products	<5 ug/mL		>20 ug/mL
Fibrinogen	180-450mg/dL	<60mg/dL	
Heparin Induced Platelet Antibody	Negative		Positive
Protime (PT)	Call Laboratory for Reference Range		>=56 sec, INR ≥5.0

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HEMATOLOGY			
Hgb	For Age Specific Reference Ranges Refer to Pathology Directory of Laboratory Services Appendices	<=7.0 g/dL	>=20.0 g/dL* (Except newborn infants.)
Hct (Only if Hgb is not reported)	For Age Specific Reference Ranges Refer to Pathology Directory of Laboratory Services Appendices	<=20.00%	
Plt	For Age Specific Reference Ranges Refer to Pathology Directory of Laboratory Services Appendices	<=40(x10e9/L)	>=1000(x10e9/L)
WBC	For Age Specific Reference Ranges Refer to Pathology Directory of Laboratory Services Appendices	<=2.0(x10e9)	>=50.0(x10e9/L)
Peripheral Smear Findings		Presence of blasts, intra, or extra cellular organisms determined as clinically relevant by Pathologist.	
Critical values are called each occurrence except on inpatients with known hematologic disturbance.			
IMMUNOLOGY			
Cryptococcal Antigen (first time positive to ID)	Negative	Positive	
Hepatitis B Antibody	Negative	Positive	
Hepatitis B Antigen	Negative	Positive	
HIV Ab/Western blot, p24 Antigen	Negative	Positive	
RSV Antigen	Negative	Positive	
Rubella IgM Antibody	Negative	Positive	
Viral Isolation	No virus isolated	Positive	
MICROBIOLOGY			
AFB cultures	No growth	Positive	
AFB smears	No AFB seen	Positive	
Blood cultures	No growth	Positive	
CSF cultures	No growth	Positive	
CSF Gram stain	No organism seen	Positive	
Mycology cultures	No growth	Positive	
O & P	No O & P seen	Positive	
Stool Cultures	No Salmonella, Shigella, or Campylobacter seen	Salmonella, Shigella, Yersinia enterocolitica, Yersinia pseudotuberculosis, "presumptive" Campylobacter, E. coli (0157:H7), Vibrio	

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TOXICOLOGY			
Acetaminophen	10-20 mg/mL		100mg/mL
Alcohols			
Acetone	Negative		1000 mg/L
Ethanol	Negative		4000 mg/L
Isopropanol	Negative		200 mg/L
Methanol	Negative		200 mg/L
Aluminum	Dialysis patient<40ug/L Environmental Exposure: 0-9 ug/L		>60 ug/L
Amikacin			
Trough	1-8 mg/L		10 mg/L
Peak	25-35 mg/L		40 mg/L
Anticonvulsants			
Carbamazepine	7-12 mg/L		15 mg/L
Phenobarbital	15-40 mg/L		50 mg/L
Phenytoin	10-20 mg/L		40 mg/L
Primidone	5-12 mg/L		15 mg/L
Barbiturate Scan			
Amobarbital	1-5 mg/L		10 mg/L
Butobarbital	1-5 mg/L		10 mg/L
Butalbital	1-5 mg/L		10 mg/L
Pentobarbital	1-5 mg/L		10 mg/L
Secobarbital	1-2 mg/L		5 mg/L
Caffeine Adults	3-15 mg/L		50 mg/L
Caffeine Children	8-20 mg/L		50 mg/L
Chloramphenicol			
Trough	5.0-10.0 mg/L		25 mg/L
Peak	10-20 mg/L		25 mg/L
Chlordiazepoxide	0.5-3.0 mg/L		5 mg/L
Clonazepam	0.015-0.060 mg/L		0.08 mg/L
Desipramine	40-160 ng/mL		400 ng/mL
Digoxin	0.5-2.0 ng/mL		2.4 ng/mL
Doxepin	50-100 ng/mL		400 ng/mL
Ethosuximide	40-100 mg/L		150 mg/L
Ethylene glycol	Negative		>0
Gabapentin	2.0-15.0 mg/L		20 mg/L
Gentamicin			
Trough	0.5-2.0 mg/L		2.0 mg/L
Peak	5.0-10.0 mg/L		12 mg/L
Haloperidol	2.0-20.0 ng/mL		50 ng/mL
TOXICOLOGY			
Heavy Metals	none detected		any positive
Ibuprofen	10-50 mg/L		200 mg/L
Lidocaine	1-5 mg/L		6 mg/L

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Lithium Saliva	1.0-3.0 ng/dL		3.50 ng/dL
Lithium RBC	0.2-0.8 ng/dL		0.9 ng/dL
Methotrexate	Subject to MD Interpretation		
N-acetyl procainamide (NAPA)	Not defined		40 mg/L
Norchlordiazepoxide	0.2-0.7 mg/L		
Nortriptyline	50-150 ng/mL		400 ng/mL
Phenytoin Free	1-2 mg/L		4 mg/L
Procainamide	4-10 mg/L		16 mg/L
Quinidine	2-5 mg/L		10 mg/L
Salicylate	150-250 mg/L		500 mg/L
Theophylline Newborn	8-12 mg/L		25 mg/L
Children/Adults	10-20 mg/L		40 mg/L
Tobramycin Trough	0.5-1.5 mg/L		12.0 mg/L
Peak	5.0-10.0 mg/L		12.0 mg/L
Tricyclics Total	50-100 ng/mL		500 ng/mL
Valproic Acid	50-100 mg/L		200 mg/L
Vancomycin Trough	5-10 mg/L		90 mg/L
Peak	30-40 mg/L		90 mg/L
URINALYSIS			
Ketones	negative		>= 80mg/dL (4+)