

Hennepin Healthcare Laboratory Critical Value List

Chemistry		
	Low	High
Bilirubin (newborn)		>15 mg/dL
Calcium, Total	< 6.0 mg/dL	> 14.0 mg/dL
Carbon Dioxide (CO2)	< 10 mEq/L	>40 mEq/L
Glucose	< 45 mg/dL	>500 mg/dL
Ionized Ca	< 3.2 mg/dL	> 6.4 mg/dL
Magnesium*	< 0.7 mEq/L	> 4.4 mEq/L
Phosphorous	< 1.2 mg/dL	>10.0 mg/dL
Potassium	< 3.0 mEq/L	>5.9 mEq/L
Sodium	< 125 mEq/L	> 160 mEq/L
Acetaminophen		>150 micro g/mL
Salicylate		> 50 mg/dL
Beta-hydroxybutyrate		>3 mmol/L
RPR (OB/L&D only)	Reactive	
<i>*Magnesium For labor and delivery patients receiving magnesium sulfate: Critical High: >8.5 mEq/L</i>		
<i>For patients on normothermia/hypothermia protocol: Critical High: > 6.1 mEq/L</i>		
Hematology		
	Low	High
Hemoglobin	<7.0 g/dL	>20.0 g/dL for > 2 years of age
Neutrophil (Absolute)	<0.5 10 ³ /uL	
WBC		>50.0 10 ³ /uL
Platelets	<40.0 10 ³ /uL	>1000 10 ³ /uL
Fibrinogen	<100 mg/dL	
APTT		>100.0 sec
Anti-Xa for Unfractionated Heparin		>0.80 IU/mL
Chromogenic Factor 10	<10%	
Protime/ INR		≥5.0
Heparin Antibody	Reactive	
Anatomic Pathology		
Frozen Sections and any unexpected diagnostic findings of immediate risk to the patient's survival.		

Toxicology

	Low	High
Amitriptyline + Nortriptyline (total)		>500 ng/mL
Caffeine		>30 microg/mL
Carbamazepine / Tegretol		>15 micro g/mL
Desipramine		>500 ng/mL
Digoxin		>2.5 ng/mL
Dilantin/Phenytoin (total)		>30.0 micro g/mL
Dilantin/Phenytoin (free)		>3.0 micro g/mL
Doxepin + Nordoxepin (total)		>500 ng/mL
Gentamicin		>10 micro g/mL
Imipramine + Desipramine (total)		>500 ng/mL
Lithium		>1.5 mEq/L
Phenobarbital		>60 micro g/mL
Theophylline		>30 micro g/mL
Tobramycin		>10 micro g/mL
Valproic Acid / Depakote		>150 micro g/mL
Vancomycin		>65 micro g/mL

Microbiology

Positive Smears

Acid-fast stain
Blood Culture (Gram stain of bottle)
Gram stain suggestive of gas gangrene
Malaria
Significant finding in an Operating room specimen
Sterile body fluid including CSF

Positive Cultures

AFB culture, excluding *M. gordonae*.
Enteric pathogen.
Groups A or B Streptococcus, any site, in a newborn (<5 months) or from labor & delivery
Highly significant or unusual microorganism (e.g. *B. anthracis*, *Y. pestis*). Per Micro Director's discretion
Significant fungal isolate from a usually sterile body site.
Sterile body fluid including CSF
Vancomycin non-susceptible *Staph aureus* (VISA or VRSA)

Positive Rapid Tests / Molecular Tests

Antigen test for Cryptococcus
Bordetella pertussis
Chlamydia and *N. gonorrhoeae* in pediatric patients
Herpes virus in CSF
Respiratory virus detected in an infant in the neonatal ICU.
TB PCR