

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 (CO ₂)	< 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	> 6.0 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	
<p><i>*Magnesium For labor and delivery patients receiving magnesium sulfate: Critical High: >8.5 mEq/L</i></p> <p><i>For patients on normothermia/hypothermia protocol: Critical High: > 6.1 mEq/L</i></p>		
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