

HCMC Laboratory Critical Value List

Hennepin Healthcare Critical Values

This critical value list is inclusive of tests performed at Hennepin County Medical Center, Hennepin Healthcare Community Clinics, and Point-of-Care testing.

CHEMISTRY

	Low	High
Bilirubin, Total (newborn, ≤ 30 days)		≥15.0 mg/dL
Calcium, Total	≤ 6.0 mg/dL	≥ 14.0 mg/dL
Carbon Dioxide (CO ₂)	≤ 10 mmol/L	≥ 40 mmol/L
Glucose	≤ 45 mg/dL	≥ 500 mg/dL
Ionized Ca	≤ 3.2 mg/dL	≥ 6.4 mg/dL
Magnesium*	≤ 0.7 mg/dL	≥ 4.4 mg/dL
Phosphorous	≤ 1.2 mg/dL	≥ 10.0 mg/dL
Potassium	≤ 3.0 mmol/L	≥ 6.0 mmol/L
Sodium	≤ 125 mmol/L	≥ 160 mmol/L
Acetaminophen		≥ 150 mcg/mL
Salicylate		≥ 50 mg/dL
Beta-hydroxybutyrate		≥ 3 mmol/L
RPR (OB/L&D only)	Reactive	
*Magnesium	For labor and delivery patients receiving magnesium sulfate: Critical High: ≥8.5 mg/dL	
	For patients on normothermia/hypothermia protocol: Critical High: ≥ 6.1 mg/dL	

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%	
INR (International Normalized Ratio)		≥ 5.0
HIT Ab (Heparin-Induced Thrombocytopenia)	Positive	

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TOXICOLOGY

	Low	High
Amitriptyline + Nortriptyline (total)		≥ 500 ng/mL
Caffeine		≥ 30 mcg/mL
Carbamazepine / Tegretol		≥ 15 mcg/mL
Desipramine		≥ 500 ng/mL
Digoxin		≥ 2.5 ng/mL
Dilantin/Phenytoin (total)		≥ 30.0 mcg/mL
Dilantin/Phenytoin (free)		≥ 3.0 mcg/mL
Doxepin + Nordoxepin (total)		≥ 500 ng/mL
Gentamicin		≥ 13 mcg/mL
Imipramine + Desipramine (total)		≥ 500 ng/mL
Lithium		≥ 1.3 mmol/L
Phenobarbital		≥ 60 mcg/mL
Theophylline		≥ 30 mcg/mL
Tobramycin		≥ 13 mcg/mL
Valproic Acid / Depakote		≥ 150 mcg/mL
Vancomycin		≥ 65 mcg/mL

MICROBIOLOGY

Blood Culture, Smear	Positive
CSF, Smear	Positive
Meningitis/Encephalitis panel, NAAT	Positive
Malaria, Rapid Antigen Test (RAT)	Positive
Malaria, Smear	Positive (if RAT negative)

ANATOMIC PATHOLOGY

Frozen Sections and any unexpected diagnostic findings of immediate risk to the patient's survival.

***Note:** In addition to the critical values identified on this list, critical alerts from testing performed at external reference laboratories will be communicated to providers and clients in accordance with notification standards once those performing laboratories notify Hennepin Healthcare.