

Test Name	Current Notification Values			FINAL CRITICAL VALUES
	Critical Value	Alert Value	Courtesy Value	Effective November 7, 2026 at Epic Beaker system go-live
GENERAL CHEMISTRY/IMMUNOLOGY				
Ammonia	≥199 µmol/L			≥199 µmol/L
Calcium (Ca)	<6.0 / >12.0 mg/dL			
Calcium, Ionized		<1.0 / >1.63 mmol/L		
Glucose				
Glucose (0-2d)	<40 mg/dL	>300 mg/dL		<40 mg/dL and >300 mg/dL
Glucose (≥3d)	<50 mg/dL	>350 mg/dL		<50 mg/dL and >350 mg/dL
Potassium (K)				
Potassium (<1Y)	<3.0 / >7.0 mmol/L			<3.0 / >7.0 mmol/L
Potassium (>1Y)	<3.0 / >6.0 mmol/L			<3.0 / >7.0 mmol/L
Potassium (H04B Patients Only)	<2.5 / >7.0 (<1Y) mmol/L			
Potassium (H04B Patients Only)	<2.5 / >6.0 (≥1Y) mmol/L			
Albumin		<1.6 / >6.0 g/dL		
Amylase		≥220 U/L		
Bicarbonate (HCO₃) / Carbon Dioxide (CO₂)		<13 / >35 mmol/L		
Bilirubin, Direct		≥2.0 mg/dL		
Bilirubin, Total				
Bilirubin, Total and Indirect (0-5d)		≥15 mg/dL		≥15 mg/dL
Bilirubin, Total and Indirect (6-13d)		≥12 mg/dL		≥12 mg/dL
Bilirubin, Total and Indirect (≥14d)		≥5 mg/dL		≥5 mg/dL
Carboxyhemoglobin (COHb)		≥21%		≥21%
Chloride		<80 / >125 mmol/L		
Cholesterol		≥400 mg/dL		
Cortisol		<2.0 ug/mL		
Creatinine		≥2.1 mg/dL		
hCG (Quantitative)		≥5 mIU/mL		
hCG (Qualitative)		Positive		Positive (initial positive per encounter)
Homocysteine		≥30 umol/L		
HVA/Creatinine (HVAC)				
HVA/Creatinine (HVAC) (0 – 2Y)		>56 mg/g CRT		
HVA/Creatinine (HVAC) (3Y – 5Y)		>33 mg/g CRT		
HVA/Creatinine (HVAC) (6Y – 17Y)		>20 mg/g CRT		
HVA/Creatinine (HVAC) (>18Y)		>10 mg/g CRT		
Lactate		≥5.0 mg/g CRT		
Lead		≥25 ug/mL		≥40 ug/mL venipuncture only
Lipase		≥416 U/L		
Lithium		>1.6 mmol/L		
Magnesium		<1.0 / >2.8 mg/dL		

Laboratory Services Critical Values Crosswalk

Methemoglobin (MetHb)		≥15%		≥15%
Osmolality		<250 / >320 osmol/Kg		
pH		<7.0 / >7.8		
Phosphorous		<2.0 / >10.0 mg/dL		
Protein, Total				
Protein, Total (0-6d)		<4.3 / >9.4 g/dL		
Protein, Total (>7d)		<4.5 / >9.4 g/dL		
Sodium (Na)		<124 / >154 mmol/L		<124 / >154 mmol/L
Triglycerides		≥1000 mg/dL		
Troponin I		≥0.3 ng/mL		≥0.3 ng/mL
Urea Nitrogen (BUN)		≥40 mg/dL		
Uric Acid		>10 mg/dL		
VMA/Creatinine (VMCR)				
VMA/Creatinine (VMCR) (0 – 2Y)		>41 mg/g CRT		
VMA/Creatinine (VMCR) (3Y – 5Y)		>17 mg/g CRT		
VMA/Creatinine (VMCR) (6Y – 17Y)		>11 mg/g CRT		
VMA/Creatinine (VMCR) (≥18Y)		>10 mg/g CRT		
HEMATOLOGY/COAGULATION				
Hemoglobin				
NCH Inpatient		≤5 / ≥22 g/dL		≤7 / >22.5 g/dL (IP & OP)
NCH Outpatient		≤8 / ≥22 g/dL		
Hematocrit				
NCH Inpatient		≤15 / ≥66 %		
NCH Outpatient		≤24 / ≥66%		
White Blood Cell Count (WBC)				
NCH Inpatient		≤2 / ≥100 x10 ³ /uL		≤2 / ≥100 x10 ³ /uL
NCH Outpatient		≤2 / ≥20 x10 ³ /uL		0-1 month ≤2 / ≥40 x10 ³ /uL >1 month ≤2 / ≥20 x10 ³ /uL
CSF (Nucleated) Cell Count		>30 cells/μL		
Platelet Count				
NCH Inpatient		≤40 / ≥800 cells/μL		≤10 / ≥800 cells/μL
NCH Outpatient		≤80 / ≥800 cells/μL		≤50 / ≥800 cells/μL
Blast		≥1%		≥1%
Malaria		1st positive result on a patient		1st positive result on a patient
Activated PTT (aPTT)		≥125 sec		≥125 sec
Fibrinogen		≤60 / ≥1000 mg/dL		
Heparin-Induced Thrombocytopenia		Positive		
Prothrombin Time (PT)		<10 / ≥35 sec		<10 / ≥35 sec
INR		>3.0		>3.0
Anti-Xa Assays-Low Molecular Weight Heparin (outpatient)			≥1.01	
DRUG LEVELS				
Acetaminophen		>30 ug/mL		>30 ug/mL
Amikacin				
Amikacin (Pre-dose / Trough)		>14.9 ug/mL		>10 ug/mL
Amikacin (Post-dose / Peak)		>60.0 mg/mL		
Carbamazepine		>12 mg/mL		
Cyclosporine				

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Cyclosporine (Pre-dose)		>500 ng/mL		>500 ng/mL
Cyclosporine (Post-dose)		>1300 ng/mL		
Drugs of Abuse (Inpatient and ED only)		Positive or Indeterminant		Positive or indeterminant for all patients <13 years
Ethanol		Positive		Positive
Gentamycin				
Gentamicin (Pre-dose or Trough)		>2.0 mg/mL		>3.0 ug/mL
Gentamicin (Post-dose or Peak)		>12.0 mg/mL		
Phenobarbital		>45 mg/mL		
Phenylalanine		>1200		
Phenytoin / Dilantin				
Phenytoin, Total (<30d)		>15 ug/mL		
Phenytoin, Total (>30d)		>25 ug/mL		
Phenytoin, Unbound (<30d)		>1.5 ug/mL		
Phenytoin, Unbound (>30d)		>2.5 ug/mL		
Phenytoin / Dilantin, Free				
Salicylate		>30 mg/dL		>30 mg/dL
Sirolimus		>18 ng/mL		>18 ng/mL
Tacrolimus		>20 ng/mL		>20 ng/mL
Theophylline				>25 ug/mL
Tobramycin				
Tobramycin (Pre-dose, Trough)		>2.0 ug/mL		>3.0 ug/mL
Tobramycin (Post-dose, Peak)		>12.0 ug/mL		
Valproic Acid		>150 mg/mL		
Vancomycin				
Vancomycin (Pre-dose, Trough)		>20 ug/mL		>40 ug/mL
Vancomycin (Post-dose, Peak)		>50 ug/mL		
INFECTIOUS DISEASE				
Positive cultures (bacterial, mycobacterial, fungal, or viral), direct microscopic exams, microbial antigen or PCR-based detection tests on blood, sterile body fluid, tissue, surgically collected urine, or indwelling device (unless the same organism from the associated blood, sterile body fluid, tissue, surgically collected urine or indwelling device has already been called as a critical).	Positive			Positive
Any agent of bioterrorism identified in culture		Positive		Positive
CMV by PCR, Quantitative on Blood or Plasma		The first detected or quantified value		
EBV by PCR, Quantitative on Blood or Plasma		The first detected or quantified value		
SARS-CoV-2				
SARS-CoV-2 Nucleic Acid Assays		Detected		
SARS Antigen		Detected		
Measles Virus by PCR		Detected		Detected
Mpox DNA, by PCR		Detected		Detected
HIV Screen		Preliminary Positive		
Rapid HIV Antigen/Antibody Screens (HIV, HIVES)		All results for needlestick protocols only		

Laboratory Services Critical Values Crosswalk

HHV6 by PCR, Quantitative on Blood or Plasma		Detected or any quantified value		
STI Testing (patients <13 years old from the Child Advocacy Center or Foster Care Clinic)			Positive	
Initial HIV, HCV, Hepatitis B Surface Antigen, and Hepatitis B Core Antibody serology			Positive	
Herpes Simplex Virus (HSV) PCR results on patients <30 days of age			Positive	Positive
<i>Neisseria gonorrhoeae</i> (isolated from any specimen type)			Positive	
Gram negative diplococci identified in genital samples from male patients <13 years old from			Positive	
Syphilis				
Rapid <i>Treponema Pallidum</i> Ab		Preliminary Positive		
<i>Treponema pallidum</i> Antibody by TP-PA Rapid Plasma Reagin (RPR)			Positive	
Acid fast bacilli (AFB) (direct smear, culture, secA sequencing, or ID confirmation)			Positive	Positive
<i>Bordetella pertussis</i> or <i>parapertussis</i>			Positive	
<i>Burkholderia cepacia</i> (1st isolate on a CF patient)			Positive	Positive
Group B Strep (<i>Streptococcus agalactiae</i>) isolated in any specimen from a patient <6 weeks old			Positive	
Organism susceptibilities (Vancomycin resistant <i>Enterococcus</i> , Vancomycin intermediate <i>Staphylococcus aureus</i> , Vancomycin resistant <i>Staphylococcus aureus</i> , Carbapenem resistant <i>Enterobacteriaceae</i> , Carbapenemase-producing carbapenem resistant <i>Pseudomonas aeruginosa</i>)			Resistant	Resistant
Penicillin binding protein			All results	
Red Cross Blood Products Gram Stain & Culture			Positive	Positive
<i>Pseudomonas aeruginosa</i>, any <i>Bacillus</i> species, or any mold isolated from an eye specimen			Positive	
Hemodialysis water or dialysate culture			>50 cfu/mL	
Fungal Direct Smear (dimorphic organism)			Positive	
Stool samples for EHEC or <i>E. coli</i> 0157 on outpatients – this includes stool cultures and molecular based tests such as the GI Film Array			Positive	
Enterovirus D68 PCR			Positive	
Varicella-Zoster Virus (VZV) PCR on patients <30 days of age			Positive	Positive