

Critical Value Callback List

CHEMISTRY (Blood)	Less Than	Greater Than	
Ammonia		>100 µmol/L	
ALT		first time >500U/L	
AST		first time >500U/L	
Bilirubin		Less than 1 d	>8 mg/dL
		1-2 d	>13 mg/dL
		3 d – 6 mo	>15 mg/dL
		>6 mo	first time >15 mg/dL
Calcium, Ionized, 0-11 mo	<3.5 mg/dL	>7 mg/dL	
Calcium, Ionized, 1 y and up	<3 mg/dL	>7 mg/dL	
Calcium, Total	<6 mg/dL	>14 mg/dL	
Carboxyhemoglobin		>10%	
CO2, Total	<11 mol/L	>45 mol/L	
Creatine Kinase, Total		first time >1000 U/L	
Glucose (0-71 h)	<40 mg/dL	>200 mg/dL	
Glucose (3 d-5 mo)	<51 mg/dL	>200 mg/dL	
Glucose (6 mo and up)	<51 mg/dL	>500 mg/dL	
Ketone		>1.5 mmol/L	
Lactate		>3.9 mmol/L	
Magnesium	<1.0 mg/dl	>7 mg/dL	
Methemoglobin		>30%	
Osmolality	<250 mmol/L	>340 mmol/L	
Phosphorus	<1 mg/dL	none	
pH	<7.2	>7.6	
pH, Cord Blood	<7.16		
Cord Base +/-	<=10		
pCO2, Arterial	<20 mmHg	>75 mmHg	
pO2, Arterial	<40 mmHg		
pO2, Capillary	<30 mmHg		
Bicarbonate	<11 mmol/L	>45 mmol/L	
Procalcitonin		>5.0 ng/ml	
Potassium	<2.7 mmol/L	>6 mmol/L	
Sodium	<120 mmol/L	>160 mmol/L	
	<125 mmol/L (peds only 0-15 years)		

Troponin T high sensitivity		first time > or = 100 ng/L
TSH, 0-3 y		>23 uIU/mL
CHEMISTRY (CSF)		
Glucose – CSF	<40 mg/dL	
COAGULATION		
INR		>5.0
aPTT		>119 sec
D-dimer		first time >20.0ug/mL
Fibrinogen Activity	<100 mg/dL	
Unfractionated Heparin (Xa) Level		> 1.10 IU/mL
Low Molecular Weight Heparin (Xa) Level		>2.00 IU/mL
SPECIAL COAGULATION		
Antithrombin Chromogenic	<30%	
Factor 8 Chromogenic	<10%	
Factor 10 Chromogenic	<10%	
Heparin-Induced Thrombocytopenia	All intermediate or positive results	
Protein C Chromogenic, 5 days and older	<20%	
Protein S Free, 5 days and older	<20%	
Von Willebrand Activity	<19%	
Von Willebrand Antigen	<10%	
Arixtra		>2.00 mcg/mL
HEMATOLOGY		
Blasts, SJN/WW only		≥1 seen
Blasts, SJN/WW Oncology only		First time ≥1 seen or 5% increase
Hemoglobin – Hospital, including CSC Mpls. & Wellness Hub	<7.0 g/dL	
Hemoglobin – Ambulatory Clinics, 0-8 days*	<8.0 g/dL	>24.0 g/dL
Hemoglobin – Ambulatory Clinics, 9 days and older	<8.0 g/dL	>20.0 g/dL
WBC – Hospital, including CSC Mpls. & Wellness Hub	first time<1.0 10e3/uL	first time>50.0 10e3/uL
WBC – Ambulatory Clinics, 0-3 days*	<2.0 10e3/uL	>35.0 10e3/uL
WBC – Ambulatory Clinics, 4 days and older	<2.0 10e3/uL	>25.0 10e3/uL
Platelet	first time<50 10e3/uL	first time>1000 10e3/uL
Absolute Neutrophil	first time<0.5 10e3/uL	
Absolute Neutrophil count, ascites/peritoneal fluid		>250.0 per uL
WBC, Peritoneal Dialysate Fluid		>100 per uL
DRUGS (Blood)		Greater Than

Acetaminophen	>150 mg/L
Amikacin	>50 mg/L
Cyclosporin	>400 µg/L
Carbamazepine	>15 mg/L
Digoxin	>2.5 µg/L
Ethanol	>0.3 g/dL
Gentamicin	>16 ug/mL traditional dosing >24 ug/mL Single Dose
Lithium	>2 mmol/L
Mycophenolic Acid	>10 mg/L
Phenobarbital	>50 mg/L
Phenytoin	>30 mg/L
Rapamycin	>20 ug/L
Salicylate	>30 mg/L
Tacrolimus	>20 ug/L
Theophylline	>25 mg/L
Tobramycin	>16 ug/mL traditional dosing >20 ug/mL Single Dose
Vancomycin	>25 mg/L
Valproic Acid	>150 mg/L
URINALYSIS	
Ketones, 0-7 days	positive with acid pH
Unidentified Cells, WW only	≥1 seen
Infectious Diseases Diagnostic Laboratory (Microbiology and Virology)	
Amoeba Culture or Stain	positive
Acid Fast Culture and/or Smear, and/or PCR first time positive or culture with new organism	positive
Blood Culture (not including expired patients)- including molecular results	positive
CSF or Serum Cryptococcal antigen	first time only positive
CSF or Urine Streptococcus pneumoniae Antigen	positive
CSF Gram Stain/Culture (bacterial, fungal)	positive
CSF Herpes Simplex Virus DNA by PCR	positive
Meningitis Encephalitis PCR Panel	positive
Blood Smears: Malaria, Babesia, Anaplasma (Ehrlichia), Trypanosoma, Leishmania, Microfilaria, Toxoplasma	positive
Rapid Malaria Screen	positive
Babesia, Anaplasma Ehrlichia by PCR	positive
Pathology	
Single Frozen sections	All results called within 30 minutes of receipt.

Update History:

1. Added lower threshold for Magnesium of <1.0 mg/dl; Lowered Procalcitonin limit to >5.0 ng/ml; Added and/or PCR to AFB culture and smear; Added pathology call section to table. Effective May 2019
2. Added High CV for aPPT and D-Dimer; updated CV for Unfractionated Heparin (Xa) Level and added Low Molecular Weight Heparin (Xa) Level high CV. Updated Arixtra. Effective Oct 2020
3. Added first time only call for CK >1000 U/L Effective March 2021
4. Removed CSF India Ink and Enterovirus PCR, these tests have been discontinued effective April 2021
5. Edited CSF or Urine Bacterial Antigens to CSF or Urine Streptococcus pneumoniae antigen, as other Bacterial Antigens were discontinued effective April 2021
6. Added Meningitis Encephalitis PCR panel, as this test as replace Bacterial Antigens, India Ink and Enterovirus PCR. Effective April 2021
7. Updated critical value first time call range for both females and males with to reflect change to high sensitivity Troponin I Assay methodology for LFV testing locations. Communication was sent to all care providers in Nov of 2021 when implemented.
8. Added critical value for Troponin T assay methodology for Roche instrument go live and updated CV ranges and units of measure for Gentamycin and Tobramycin testing. Communication sent to providers of changes as Roche instrumentation went live. Updated CV reporting in clinics for WBC and Hgb. Added CV for peritoneal fluids. July 2022
9. Removed Free Phenytoin and Free Valproic Acid from grid as these are now sent to a reference lab and will follow that workflow for critical value notification. Sept 2022
10. Added Sodium CV of <125 mmol/L for pediatric patients (0-15 years old) removed Gent and Tobra CVs as performed on Vista analyzers as all been decommissioned June 2023
11. Consolidated legacy Fairview and legacy HealthEast documents
12. Removed Troponin I
13. Removed CSF Cryptococcal culture. Added bacterial, fungal to CSF Gram Stain/Culture.
14. Removed reducing substance from urine section as no longer tested.
15. Updated units of measure for pediatric TSH from mIU/L to uIU/ml.
16. Removed for East Regions differences for Blood Gases and added base excess for cord. Changed St. Johns pneumatic to match Epic as “SJN”. Added Wellness Hub to hospital critical value for hemoglobin and WBC.
17. Removed Oxyhemoglobin for Woodwinds.
18. *Added age specific cut-offs for ambulatory critical values to align with ambulatory normal ranges to avoid calling a result critical that is within normal range.
19. Separated “Factors” into “Factor 8 Chromogenic” and “Factor 10 Chromogenic”
20. Removed Oxygen critical Saturation for Woodwinds.
21. Updated methemoglobin range to match reportable range
22. Updated to include Babesia, Anaplasma Ehrlichia by PCR
23. Updated blasts to include WW oncology.