

Outpatient Critical, Alert and Courtesy Values

CRITICAL VALUE LIST

Critical lab values will be called **immediately, 7 days per week** by laboratory personnel to the responsible licensed caregiver. At least **two attempts** will be made to contact the licensed caregiver or their office via phone service or pages. A voice mail will not be left by the laboratory. **After two attempts** laboratory personnel will contact the Laboratory Section Director. The laboratory director may decide to contact an ED staff physician to review the critical value. Such a discussion may result in a decision to contact the patient's family directly and recommend that the patient be brought to the ED immediately.

MICROBIOLOGY:

Positive cultures (bacterial, mycobacterial, fungal or viral), direct microscopic exams, microbial antigen or PCR-based detection tests on any 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. This excludes: BAL, bronchoscopy, sinus, specimens or repeat specimens from the same source that were already called as critical.

CHEMISTRY:

Analyte	Low/High Critical Value	Units
Ammonia	≥ 199	$\mu\text{mol/L}$
Calcium	< 6.0 / > 12.0	mg/dL
Glucose	< 40 (0-2d) < 50 (≥ 3 d)	mg/dL
Potassium	< 3.0 / > 7.0 (< 1 Y) < 3.0 / > 6.0 (≥ 1 Y)	mmol/L

ALERT VALUE LIST

Outpatient alert values will be called within **2 hours** during the hours of **7 a.m. to 11 p.m., 7 days per week**. Alert values will not be called during the hours of 11 p.m. to 7 a.m.

MICROBIOLOGY
1. Any Agent of Bioterrorism identified in culture

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CHEMISTRY		
Analyte	Low/High Alert Value	Units
pH (blood gas)	<7.0 / >7.8	
Albumin	<1.6 / >6.0	g/dl
Amylase	≥220	U/L
Bilirubin Direct	≥2.0	mg/dL
Bilirubin, Total and Indirect	≥15 (0-5d)	mg/dL
	≥12 (6-13d)	
	≥5 (≥14d)	
BUN	≥40	mg/dL
Carboxyhemoglobin	≥21	%
Chloride	<80 / >125	mmol/L
Cholesterol	≥400	mg/dL
HCO ₃ and CO ₂	<13 / >35	mmol/L
Creatinine	≥2.1	mg/dL
Glucose	>300 (0-2d)	mg/dL
	>350 (≥3d)	
Ionized Calcium	<1.0 / >1.63	mmol/L
Lactate	≥5.0	mmol/L
Lipase	≥416	U/L
Methemoglobin	≥15	%
Magnesium	<1.0 / >2.8	mg/dL
Osmolality	<250 / >320	Osmol/Kg
Phosphorous	<2.0 / >10.0	mg/dL
Protein, Total	<4.3 / >9.4 (0-6d)	g/dL
	<4.5 / >9.4 (≥7d)	
Sodium	<124 / >154	mol/L
Triglycerides	≥1000	mg/dL
Uric Acid	>10	mg/dL
HEMATOLOGY		
WBC	≤2 / ≥20	x10 ³ /uL
Hemoglobin	≤8 / ≥22	g/dL
Hematocrit	≤24 / ≥66	%
Platelet	≤80 / ≥800	x10 ³ /uL
Blast	≥1	%
Malaria	1 st positive on patient	

DRUGS TOXICOLOGY		
Analyte	Low/High Alert Value	Units
Acetaminophen	>30	µg/mL
Amikacin	Pre-Dose >14.9	µg/mL
	Post-Dose >60.0	
Carbamazepine	>12	µg/mL
Cyclosporine	Pre-dose>500	ng/mL
	Post-dose >1300	
Ethanol	Positive	
Gentamicin	Pre-dose >2.0	µg/mL
	Post-dose >12.0	
Lead	≥25	µg/mL
Lithium	>1.6	mmol/L
Phenobarbitol	>45	µg/mL
Phenytoin, Total	>15 (<30d)	µg/mL
	>25 (≥30d)	
Phenytoin, Unbound	>1.5 (<30d)	µg/mL
	>2.5 (≥30d)	
Salicylate	>30	mg/dL
Sirolimus	>18	ng/mL
Tacrolimus	>20	ng/mL
Tobramycin	Pre-dose >2.0	µg/mL
	Post-dose >12.0	
Valproic Acid	>150	µg/mL
Vancomycin	Pre-dose >20	µg/mL
	Post-dose >50	
COAGULATION		
Fibrinogen	≤60 / ≥1000	mg/dL
Prothrombin Time	<10 / ≥35	sec
Activated PTT	≥125	sec
INR	3.0	
Heparin-Induced Thrombocytopenia	Positive	

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HORMONES		
Analyte	Low/High Alert Value	Units
hCG	Quantitative: ≥ 5	mIU/mL
	Qualitative: Positive	
Cortisol	< 2.0	$\mu\text{g/mL}$
Phenylalanine (PATY)	≥ 20	mg/dL
Troponin I	≥ 0.3	ng/dL
Homocysteine	≥ 30	$\mu\text{mol/L}$
HVA/Creatinine	> 56 (0 – 2Y)	mg/g CRT
	> 33 (3Y – 5Y)	
	> 20 (6Y – 17Y)	
VMA/Creatinine	> 41 (0 – 2Y)	mg/g CRT
	> 17 (3Y – 5Y)	
	> 11 (6Y – 17Y)	
	> 10 ($\geq 18Y$)	

INFECTIOUS DISEASE		
Analyte	Low/High Alert Value	Units
Rapid HIV Antigen/Antibody Screens	All positive and negative for needle stick profiles	
SARS Antigen	Detected	
SARS CoV-2 Nucleic Acid	Detected	
Monkeypox DNA, by PCR	Detected	
Measles Virus, by PCR	Detected	
CMV by PCR, Quant on Blood or Plasma	The first Detected or quantified value – subsequent detected or quantified values are not considered alert values	IU/mL
EBV by PCR, Quant on Blood or Plasma	The first Detected or quantified value – subsequent detected or quantified values are not considered alert values	copies/mL
HHV6 by PCR, Quant on Blood or Plasma	Detected or any quantified value	copies/mL

COURTESY VALUES

Courtesy values will be called between **7 a.m. and 5 p.m., 7 days per week.**

- Any positive AFB direct smear, culture, secA sequencing, or ID confirmation by ODH on non-sterile sites (ex: respiratory/urine)
- Any positive fungal direct smear or culture that suggests a dimorphic organism
- Neisseria meningitidis* isolated from a non-sterile site. (Also called to Epidemiology)
- Any of the following organism susceptibilities: Vancomycin resistant Enterococcus, Vancomycin intermediate Staphylococcus aureus, Vancomycin resistant Staphylococcus aureus, Carbapenem resistant Enterobacteriaceae, Carbapenemase-producing carbapenem resistant Pseudomonas aeruginosa
- Group B Strep (*Streptococcus agalactiae*) isolated in any specimen from a patient < 6 weeks old
- Neisseria gonorrhoeae* isolated from any specimen type
- Any positive sexually transmitted infection (STI) for patients < 13 years old from the Child Advocacy Center or Foster Care Clinic

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COURTESY VALUES *continued*

8. Gram negative diplococci identified in genital samples from male patients <13 years old from the Child Advocacy Center or Foster Care Clinic
9. Any positive RPR test
10. *Pseudomonas aeruginosa*, any *Bacillus* species, or any mold isolated from an eye specimen
11. Positive findings on stool samples for EHEC or *E. coli* 0157 on outpatients – this includes stool cultures and molecular based tests such as the GI Film Array
12. Any respiratory sample which detects *Bordetella pertussis* or parapertussis
13. 1st *B cepacia* isolate on a CF patient
14. Any positive Enterovirus D68 PCR result
15. Positive Herpes Simplex Virus (HSV) PCR results on patients <30 days of age
16. Positive Varicella-Zoster Virus (VZV) PCR results on patients <30 days of age
17. Initial positive HIV, HCV, Hepatitis B Surface Antigen, and Hepatitis B Core Antibody serology results (Courtesy CallBack added by Core Lab staff)

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Note: Due to many Community Practice Physician offices being closed on weekends and holidays, the following results will continue to be called to the on-call provider on weekends and holidays only. A report will be reviewed by Client Services at 7 a.m., 12 p.m., and 4 p.m. Saturday, Sunday and holidays. The following tests will be included in the report and called by Client Services.

Cultures with the following test results:

Urine Culture with >100,000 cfu/mL of growth (Urine cultures with growth of Distal urethral/perineal flora does not need to be called as this is normal flora)
Positive Stool Culture for Shigella, Salmonella, Aeromonas, Yersinia, Campylobacter, E. coli, Edwardsiella, Plesiomonas

Positive or Detected results for the following tests:

Rapid Influenza A/B Ag
Rapid RSV Ag
Rapid Influenza and SARS/CoV-2 Ag
Rapid Molecular Group A Strep, throat
Respiratory Infection Array
Gastrointestinal Infection Array
Group A Strep Molecular, Throat
Mycoplasma Pneumoniae by PCR