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	μmol/L
Calcium	<6.0 / >12.0	mg/dL
Glucose	<40 (0-2d) <50 (≥3d)	mg/dL
Potassium	<3.0 / >7.0 (<1Y) <3.0 / >6.0 (<u>></u> 1Y)	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



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,	≥15 (0-5d)	mg/dL
Total and Indirect	≥12 (6-13d)]
	≥5 (≥14d)]
BUN	≥40	mg/dL
Carboxyhemoglobin	≥21	%
Chloride	<80 / >125	mmol/L
Cholesterol	<u>></u> 400	mg/dL
HCO₃ and CO₂	<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	g/dL
	(0-6d)	-
C - II - · ·	<4.5 / >9.4 (<u>></u> 7d)	
Sodium	<124 / >154	mol/L
Triglycerides	≥1000	mg/dL
Uric Acid	>10	mg/dL
	MATOLOGY	V /ma ma 3
WBC	<2 / ≥20	K/mm³
Hemoglobin	≤8/≥22	gm/dL
Hematocrit	≤24/≥66	%
Platelet	≤80/≥800	K/mm³
Blast	<u>≥</u> 1	%
Malaria	1 st positive on patient	

DRUGS TOXICOLOGY		
Analyte	Low/High Alert	Units
	Value	
Acetaminophen	>30	μg/mL
Amikacin	Pre-Dose >8.0	μg/mL
	Post-Dose >40.0]
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	<u>></u> 25	μg/mL
Lithium	>1.6	mmol/L
Phenobarbitol	>45	μg/mL
Phenytoin, Total	>15 (<30d)	μg/mL
	>25 (<u>></u> 30d)	
Phenytoin, Unbound	>1.5 (<30d)	μg/mL
	>2.5 (<u>></u> 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	
	AGULATION	1
Fibrinogen	<u><</u> 60 / <u>></u> 1000	mg/dL
Prothrombin Time	<10 / <u>></u> 35	sec
Activated PTT	<u>></u> 125	sec
INR	3.0	
Heparin-Induced	Positive	
Thrombocytopenia		



H	ORMONES	
Analyte	Low/High Alert Value	Units
hCG	Quantitative: <u>></u> 5	mIU/mL
	Qualitative: Positive	
Cortisol	<2.0	μg/mL
Phenylalanine (PATY)	<u>≥</u> 20	mg/dL
Troponin I	<u>≥</u> 0.3	ng/dL
Homocysteine	<u>≥</u> 30	μmol/L
HVA/Creatinine	>56 (0 – 2Y)	
	>33 (3Y – 5Y)	mg/g CRT
	>20 (6Y – 17Y)	
VMA/Creatinine	>41 (0 – 2Y)	
	>17 (3Y – 5Y)	,
	>11 (6Y – 17Y)	mg/g CRT
	>10 (<u>></u> 18Y)	

INFECTION	OUS DISEASE	
Analyte	Low/High Alert Value	Units
Rapid HIV	All positive and	
Antigen/Antibody	negative for	
Screens	needle stick	
	profiles	
SARS Antigen	Detected	
SARS CoV-2 Nucleic	Detected	
Acid		
Monkeypox DNA, by PCR	Detected	
Measles Virus, by PCR	Detected	
CMV by PCR, Quant on	Detected or any	IU/mL
Blood or Plasma	quantified value	IO/IIIL
EBV by PCR, Quant on	Detected or any	copies/mL
Blood or Plasma	quantified value	copies/IIIL
HHV6 by PCR, Quant on	Detected or any	copies/mL
Blood or Plasma	quantified value	copies/IIIL

COURTESY VALUES

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

- Any positive AFB direct smear, culture, secA sequencing, or ID confirmation by ODH on non-sterile sites (ex: respiratory/urine)
- 2. Any positive fungal direct smear or culture that suggests a dimorphic organism
- 3. Neisseria meningitidis isolated from a non-sterile site. (Also called to Epidemiology)
- 4. 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
- 5. Group B Strep (Streptococcus agalactiae) isolated in any specimen from a patient <6 weeks old
- 6. Neisseria gonorrhoeae isolated from any specimen type
- 7. Any positive sexually transmitted infection (STI) for patients <13 years old from the Child Advocacy Center or Foster Care Clinic



COURTESY VALUES continued

- 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)



<u>Note</u>: 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, or Edwardsiella

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

