

Critical Value Process for Outpatients

Effective February 26, 2024, Clinical Labs of Hawaii will update the Critical Value Table as listed below.

Laboratories commonly refer to critical values as results requiring immediate notification to the ordering provider for necessary patient evaluation or treatment. Regulations from agencies and accreditors such as the Centers for Medicare and Medicaid Services (CMS), The Joint Commission, and the College of American Pathologists (CAP) mandate that laboratories develop and implement an alert system for critical values.¹ Failure to do so may result in patient harm and severe penalties.

All test results exceeding the critical values below will be called, as soon as results are available, to the ordering provider listed on the laboratory order or to a designated alternate:

CHEMISTRY	
Bilirubin, Neonatal	≥15 mg/dL(≤2d), ≥18 mg/dL(≥3-14d)
Calcium	≤6.0 and ≥13.0 mg/dL
CKMB	>4.0 ng/mL
Glucose	≤40 and ≥500 mg/dL
Glucose (neonatal)	≤30 and ≥300 mg/dL
Magnesium	≤1.0 and ≥5.0 mg/dL
Phosphorous	≤1.0 and ≥8.0 mg/dL
Potassium	≤2.8 and ≥6.0 mmol/L
Sodium	≤120 and ≥160 mmol/L
Troponin	≥52 ng/L
THERAPEUTIC DRUGS	
Acetaminophen	≥150.0 mcg/mL
Carbamazepine (Tegretol)	≥15.0 mcg/mL
CSA	>600 ng/mL
Digoxin	>2.0 ng/mL
FK506	>25 ng/mL
Gentamicin (Trough)	>2.0 mcg/mL
Lidocaine	>5.0 mcg/mL
Lithium	≥1.6 mmol/L
Phenobarbital	>60.0 mcg/mL
Phenytoin (Dilantin)	≥40.0 mcg/mL
Primidone	>15.0 mcg/mL
Procainamide	≥16.0 mcg/mL
Procainamide + NAPA	>30.0 mcg/mL
Quinidine	≥5.0 mcg/mL
Salicylate	>30.0 mcg/mL
Theophylline	>20.0 mcg/mL
Tobramycin (Peak)	≥12.0 mcg/ml
Tobramycin (Trough)	≥2 mcg/mL
Valproic Acid	≥150.0 mcg/mL
Vancomycin (Peak)	>60.0 mcg/mL
Vancomycin (Trough)	>20.0 mcg/mL
Methotrexate	Call all results

COAGULATION	
Fibrinogen	<100 mg/dL
D-dimer	≥1.9 ug/mL FEU
PT (INR)	≥4.0
APTT	>110 seconds
HEMATOLOGY	
Hemoglobin	≤7.0 and ≥20.0
Platelet Count	≤40 and ≥1000
WBC	≤2.0 and ≥30.0

MICROBIOLOGY	
AFB Culture/Smear/TB PCR	Positive
Aeromonas species	Positive if patient <4 or >65
Blood Culture gram stain	Positive
Bone marrow(sterile site)	Positive
CRPA Carbapenem-Resistant Pseudomonas aeruginosa	Positive
CRE Carbapenem-Resistant Enterobacteriaceae	Positive
Cryptococcal Antigen	Positive
Gram Stain/Culture, CSF	Positive
Listeria species	Positive
Malaria Smear	Positive
Microfilaria smear	Positive
Neisseria meningitidis	Positive
Norovirus	Positive
Vibrio species	Positive
VISA(Vancomycin- Intermediate Staph aureus)	Positive
VRSA(Vancomycin-Resistant Staph aureus)	Positive
VRE (Vancomycin-Resistant Enterococci)	Positive
Yersinia species	Positive

Results listed in the table below will be called to the ordering provider listed on the laboratory order or to a designated alternate during office hours:

MICROBIOLOGY	
Bordetella pertussis PCR	Positive -office hours
Bordetella pertussis culture	Positive -office hours
Candida auris	Positive -office hours
Campylobacter species	Positive -office hours
CAPD smear/culture	Positive -office hours
Chlamydia culture	Positive -office hours
Clostridium species	Positive -office hours
Coccidioides species	Positive -office hours
E.coli O157	Positive -office hours
Enterovirus, PCR	Positive -office hours
GC culture/smear	Positive -office hours
Joint & other sterile fluids	Positive -office hours
Legionella DFA smear/culture	Positive -office hours
Legionella urine antigen	Positive -office hours
Salmonella species	Positive -office hours
Shigella species	Positive -office hours
Strep Group A (throat)	Positive -office hours (Peds- page after
Strep pneumoniae urine/CSF	Positive -office hours
Tissue cultures	Positive -office hours
MISCELLANEOUS	
HIV12	Positive- office hours
GC NAAT	Positive -office hours
Chlamydia NAAT	Positive -office hours
PATHOLOGY	
New or unexpected malignant diagnosis	

If you have any questions, please contact our Client Services Department at 808-677-7998 (Oahu) or 1-866-281-6816 (toll free). You may also contact your CLH sales/marketing representative.

References:

1. College of American Pathologists; Consensus Statement on Effective Communication of Urgent Diagnoses and Significant, Unexpected Diagnoses in Surgical Pathology and Cytopathology from the College of American Pathologists and Association Directors of Anatomic and Surgical Pathology; Nakhleh RE, Myers JL, Allen TC, et al.; April 22, 2017.

Thank you for choosing Clinical Labs of Hawaii