

CRITICAL LIMITS FOR LABORATORY TEST VALUES

*Critical values will be reported only for tests that are ordered. No results for unordered tests will be given.

*Critical values are posted in the on-line laboratory handbook.

*Laboratory personnel will initiate notification of an appropriate caregiver (physician, house staff, or nurse) of any defined critical value(s) detected within 20 minutes of detection of the result in the lab. After 20 minutes, the Organizational Policy #201, "Chain of Command of the Unstable Patient", will be followed.

*Reference separate Microbiology/Virology/Histology and Pathology critical policy procedures.

DEPARTMENT/TEST	VALUE
CRITICAL TESTS (The following two tests will be called every time regardless of result)	
Frozen Section of Surgical Specimens: 90% within CAP Guidelines of 20 minutes.	
Gram Stains	All CSF gram stains (positive or negative)
CRITICAL RESULTS (The following test results will be called based on defined result ranges and policies listed above)	
CHEMISTRY	
Ammonia	>150 umol/L
Bilirubin, Total	>12 mg/dL at <one day old >15 mg/dL all others
Calcium	<6 or >14 mg/dL
Carbon Dioxide	<10 or >40 mEq/L
CPK	>4000 U/L
HCO ₃	<10 or >40 mEq/L
Glucose	<50 or >300 mg/dL
Ionized Calcium	<1.5 mEq/L
Lactate	>45 mg/dL
Lead	>30 ug/dL
Magnesium	<1.2 or >6.6 mg/dL
pCO ₂	<15 or >70 mm Hg
pH	<7.2 or >7.6
Phosphorus	<2 - >10 mg/dL
pO ₂ (Arterial)	<40 mm Hg
Potassium	<2.5 or >6.5 mEq/L
Sodium	<124 or >156 mEq/L
Triglycerides	>3000 mg/dL
Uric Acid	>10 mg/dL

COAGULATION		
Fibrinogen	<80 mg/dL	
Protime (PT)	>17 seconds	
PT (INR)	>1.7	
WPT (INR) Patients on warfarin therapy	<1.4 or >3.5	
PTT	>48 seconds	
Thrombin Time	>25 seconds	
Heparin Unfractionated	>1.0 IU/mL	
HEMATOLOGY		HEM/ONC CLINICS
Hemoglobin	<7.0 gm/dL	<5.0 gm/dL
Hematocrit	<21 or >65%	Notification not required
Platelets	<50,000 or >1,000,000	<5,000
WBCs	Newborn <5,000 or >35,000 Others <2,000 or >25,000	Notification not required
Morphology	Presence of Blasts; however, if the presence of Blasts has been reported within the last 14 days no notification is necessary.	
CEREBROSPINAL FLUID		
Protein	>150 mg/dL	
Glucose	<31 mg/dL	
MICROBIOLOGY/VIROLOGY		
AFB	Positive	
Blood Culture	Positive	
Body Fluid (sterile) Culture	Positive	
CSF Culture	Positive	
Fungal Culture – Syst Infect	Positive	
TOXICOLOGY		
Acetaminophen	>25 ug/mL	
Carbamazepine	>20 ug/mL	
Gentamicin, Random	>40 ug/mL	
Gentamicin, Peak Conv.	>12 ug/mL	
Gentamicin, Trough Conv.	>3 ug/mL	
Gentamicin, Post Dose Extended Interval	>40 ug/mL	
Lithium	>1.5 mmol/L	
Methotrexate	>1 umol/mL	
Phenobarbital	>60 ug/mL	
Phenytoin	>30 ug/mL	
Salicylate	>30 mg/dL	
Tobramycin	>10 ug/mL	

Valproic Acid	>200 ug/mL
Vancomycin	>50 ug/mL
Urine Toxicology Screen	Any positive

BLOOD BANK

Any undue delay in transfusing a patient due to the inability to find a compatible product or due to the unavailability of a product.

Acute hemolytic or anaphylactic reaction.

Identification of a blood product as potentially contaminated by bacteria after the unit has been transfused.

REFERENCE LAB

Any critical limit phoned as defined by the reference laboratory.

Updated: 11/12/2024