

The University of Chicago Medical Center Laboratories
Critical Value List

Please read the [Critical Value Report](#) document for additional information regarding laboratory critical value communication

Clinical Chemistry (Serum)				
Analyte	Unit	Low	High	Age Range
Bilirubin Total, Newborn	mg/dL	----	>18	0-14 days
Calcium	mg/dL	< 6.0	>13	Any Age
Carbon Dioxide, Total	mmol/L	< 10	>40	Any Age
Glucose	mg/dL	< 40	>500	Any Age
Glucose, Newborn	mg/dL	< 30	>300	0-14 days
Magnesium	mg/dL	< 1.0	>8	Any Age
Phosphate	mg/dL	< 1.0	----	Any Age
Potassium	mmol/L	< 2.8	>6.2	Any Age >14 days
Potassium Newborn	mmol/L	< 2.8	>8	0-14 days
Sodium	mmol/L	< 120	>160	Any Age
Clinical Chemistry Toxicology/TDM (Serum)				
Analyte	Unit	Low	High	Age Range
Acetaminophen	ug/mL	----	> 150.0	Any Age
Amikacin	ug/mL	----	> 40.0	Any Age
Carbamazepine	ug/mL	----	> 20.0	Any Age
Digoxin	ng/mL	----	> 3.0	Any Age
Gentamicin	ug/mL	----	> 10.0	Any Age
Lidocaine	ug/mL	----	> 9.0	Any Age
Lithium	mmol/L	----	> 2.00	Any Age
Phenobarbital	ug/mL	----	> 60.0	Any Age
Phenytoin	ug/mL	----	> 40.0	Any Age
Salicylate	mg/dL	----	> 30.0	Any Age
Theophylline	ug/mL	----	> 25.0	Any Age
Tobramycin	ug/mL	----	> 10.0	Any Age
Valproic Acid	ug/mL	----	> 200	Any Age
Vancomycin	ug/mL	----	> 50.0	Any Age

The University of Chicago Medical Center Laboratories
Critical Value List

<u>Coagulation</u>				
<u>Analyte</u>	<u>Unit</u>	<u>Low</u>	<u>High</u>	<u>Age Range</u>
Activated PTT	sec		> 100.0	Any Age
ADAMTS-13	%	≤ 10		Any age
PT INR			≥ 4.0	Any Age
Fibrinogen	mg/dL	< 80		Any Age
<u>Hematology</u>				
<u>Analyte</u>	<u>Unit</u>	<u>Low</u>	<u>High</u>	<u>Age Range</u>
Hematocrit	%	< 20	> 60	Any Age
Hemoglobin	gm/dL	< 6.0	> 20.0	Any Age
Platelet Count	per uL	< 30,000	> 1,000,000	Any Age
White Cell Count	per uL	< 1,000	> 30,000	Any Age
White Cell Diff	uL	< 0.5 Neutrophils K/uL when the WBC is > 1.0 K/uL.		Any Age
Blast Cells		> 4% from outpatient/emergen cy room patients		
When smears indicate that the platelet count is markedly decreased (less than 30,000/uL), but no platelet count was ordered, a platelet count is automatically performed and called as a critical value if less than 30,000/uL.				
Intracellular organisms and intracellular and extracellular parasites in: blood, CSF, pericardial fluid, peritoneal fluid (paracentesis), pleural fluid, synovial fluid; intracellular and extracellular yeast and pneumocystis in BAL				
Hematology critical values <i>may not be called back</i> if the patient has had <i>a similar critical value within 48 hours</i> (except HCT less than 15% and platelets less than 10,000/uL which will always be called).				
Note: There are no critical values for urinalysis.				
<u>Microbiology</u>				
Blood: Initial presence of organisms by microscopic examination or growth is a critical value. No notification of additional positive cultures will be made within 3 days of the first notification if gram stain morphology or organism identification remains the same.				
Bone Marrow: Positive for organisms by microscopic examination or culture growth.				
CSF: Positive for organisms by microscopic examination or culture growth, or detection of organism-specific nucleic acid (PCR) in CSF. First-time positive <i>Cryptococcus</i> Latex Agglutination.				

The University of Chicago Medical Center Laboratories
Critical Value List

<u>ALL LABORATORIES</u>				
All Amended Reports are treated as Critical Values for purposes of reporting requirements.				