

Critical Value and Toxic Concentration List

<i>Results are called to a licensed caregiver with read-back of results.</i>		
Chemistry Department		
Acetaminophen		>150 mcg/mL
Albumin	<1.5 g/dL	>6 g/dL
Bilirubin, Total		≥15 mg/dL
BUN (Blood Urea Nitrogen)		≥104 mg/dL
Calcium, Total	≤6.0 mg/dL	≥13 mg/dL
Calcium, Ionized	<0.77 mmol/L	>1.57 mmol/L
Carbamazepine (Tegretol®)		>15 mcg/mL
Carbon Dioxide (CO ₂)	≤10 mmol/L	≥40 mmol/L
Carbon Monoxide		>19.9%
Chloride	≤75 mmol/L	≥126 mmol/L
Creatinine		>7.49 mg/dL
Digoxin		>2.00 ng/mL
Ethanol		>300 mg/dL or >0.30 %
Gentamicin, Peak		>10 mcg/mL
Gentamicin, Trough or Random		>2 mcg/mL
Glucose – Adult (18 to Unspec.)	<51 mg/dL	>399 mg/dL
0-1 day	<40 mg/dL	>199 mg/dL
1 day to 1 year	<50 mg/dL	>199 mg/dL
1 year to 18 year	<50 mg/dL	>199 mg/dL
HCO ₃	<10.1 mmol/L	>39.9 mmol/L
Lactic Acid		>3.3 mmol/L
Lead		>10.0 mcg/dL
Lithium		Toxic >1.50 mmol/L
Magnesium	≤1.0 mg/dL	≥5.0 mg/dL
pCO ₂ Arterial	≤20.0 mmHg	≥70 mmHg
pH Venous/Arterial	≤7.20 pH units	≥7.60 pH units
Phenytoin (Dilantin)		>20 mcg/mL
Phosphorous	≤1.0 mg/dL	≥8.9 mg/dL
pO ₂ Arterial	≤45.0 mmHg	
Potassium	≤2.8 mmol/L	≥6.2 mmol/L
Protein, CSF		>46 mg/dL

Chemistry Department		
Salicylate		≥30 mg/dL Lethal >70 mg/dL
Sodium - Adult	≤120 mmol/L	≥160 mmol/L
0 to 18 yrs	<124 mmol/L	>156 mmol/L
HS Troponin I		>50 pg/mL
Valproic Acid		>150 mcg/mL
Vancomycin, Peak		≥80 mcg/mL
Vancomycin, Trough or Random		≥30 mcg/mL
Coagulation and Hematology Department		
Heparin Anti-Xa, Plasma (Low molecular weight heparin only)		>2.0 IU/mL
Differential		Presence of any blasts, auer rods or shistocytes>1+ on smear
Hemoglobin ≥7 days old	<7.0 /uL	>25.0 /uL
Newborn 0 to 7 days old	<9.0 /uL	>26.0 /uL
Platelet Count	<50 x10(3)/uL	>1,000 x10(3)/uL
Prottime, INR		≥5.0 INR
PTT		≥120 seconds
White Blood Cell Count (WBC) ≥4 days	<2.0 x10(3)/uL	>34.0 x10(3)/uL
Newborn 0 up to 4 days	<5.1 x10(3)/uL	>39.0 x10(3)/uL
Blood Bank Department Inadequate blood supply to meet patient's needs Detection of antibodies that may cause transfusion delay Hemolytic transfusion reaction Transfusion before crossmatch complete Bacterial contamination		
Microbiology Department Positive results on: Gram stain on spinal fluid, blood, bone marrow, and sterile sites Blood culture Spinal fluid bacterial antigens Group B streptococcus on newborns and patients in labor/delivery Zygomycete from sinus, eye, and nose Blood parasites		