

CRITICAL AND ALERT VALUES TABLE

CHEMISTRY

Analyte	ALERT LEVELS			CRITICAL LEVELS		
	Age ¹	Low	High	Age ¹	Low	High
Ammonia				< 1 year ≥ 1 year		≥ 150 umol/L ≥ 500 umol/L
Amylase	All		≥ 300 U/L			
Bicarbonate (TCO ₂)				All	≤ 10 mM/L	≥ 40 mM/L
Bilirubin, Total	≤ 2 months > 2 months		12.1 - 14.9 mg/dL > 20 mg/dL	≤ 2 months		≥ 15.0 mg/dL
Calcium, Total				All	≤ 6.5 mg/dL	≥ 13.0 mg/dL
Calcium, Ion.				All	≤ 0.8 mM/L	> 1.55 mM/L
CK (CPK)	All		≥ 5000 U/L			
Complement Levels	< 1 month	None detected				
Creatinine	All		≥ 6.0 mg/dL			
CSF Analysis				All	Any significant deviation outside the reference interval.	
Glucose	> 30 days		350 - 499 mg/dL	≤ 30 days > 30 days	≤ 35 mg/dL ≤ 40 mg/dL	≥ 200 mg/dL ≥ 500 mg/dL
Hepatitis A, IgM	All		Reactive			
IgA	All	None detected				
Iron	≤ 12 years		≥ 500 mcg/dL			
Magnesium				All	< 1.0 mg/dL	≥ 6.0 mg/dL
Osmolality				All	< 190 mOsm/kg	≥ 390 mOsm/kg
Phosphorous				All	≤ 1.0 mg/dL	
Potassium				≤ 30 days > 30 days	≤ 2.5 mEq/L ≤ 3.0 mEq/L	≥ 6.5 mEq/L ≥ 6.0 mEq/L
Sodium				All	≤ 120 mEq/L	≥ 160 mEq/L
T4, Free	< 50 years ≥ 50 years		≥ 9.0 ng/dL ≥ 6.0 ng/dL			
TSH	≤ 1 year		≥ 50 mIU/L			

¹ When age is not specified on the requisition, all results meeting the criteria should be reported as Alert/Critical.

CRITICAL AND ALERT VALUES TABLE

HEMATOLOGY, HEMOSTASIS and URINALYSIS

Analyte	ALERT LEVELS			CRITICAL LEVELS		
	Age ¹	Low	High	Age ¹	Low	High
Hemoglobin				≤ 3 months > 3 months	≤ 8.0 gm/dL ≤ 6.0 gm/dL	≥ 22.5 gm/dL
Hematocrit				All	≤ 23 %	
Neutrophils, Absolute	All		> 30.0 thou/cmm	All	< 0.40 tho/cmm	
Platelet Count				All	≤ 50 tho/cmm	≥ 1000 tho/cmm
WBC	All			All	≤ 1.0 tho/cmm	≥ 50.0 tho/cmm
D-dimer	All		≥ 3.0 mg/L			
Fibrinogen				All	≤ 99 mg/dL	
INR, PT (Prothrombin Time)	All		5.0 – 5.9	All		≥ 6.0
Partial Thromboplastin Time (PTT)	All		60 - 89 seconds	All		≥ 90 seconds
CSF Analysis				All	Any significant deviation outside the reference interval.	
Reducing Substance (Urinalysis, Clinitest)	≤ 2 years		Positive			
Urinalysis				< 31 days	Positive Protein, Glucose or Ketones	

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CLINICAL TOXICOLOGY and TDM's

Analyte	ALERT			CRITICAL		
	Age ¹	Low	High	Age ¹	Low	High
Acetaminophen	All		21 – 49 mg/L	All		≥ 50 mg/L
Carbamazepine, Total	All		12.1 - 19.9 mg/L	All		≥ 20 mg/L
Carboxyhemoglobin (Carbon Monoxide)	All		15-19% of total hemoglobin	All		≥ 20% of total hemoglobin
Digoxin	All		2.1 - 2.4 mcg/L	All		≥ 2.5 mcg/L
Ethanol				All		≥ 300 mg/dL
Gentamicin, Trough				All		> 2.0 mg/L
Lithium	All		1.6 - 2.0 mEq/L	All		≥ 2.1 mEq/L
Methemoglobin	All		> 12 % of total hemoglobin			
Phenobarbital	All		40.1 - 59.9 mg/L	All		≥ 60.0 mg/L
Phenytoin	All		35.1 - 39.9 mg/L	All		≥ 40.0 mg/L
Phenytoin, Free	All		≥ 3.0 mg/L			
Salicylates				All		≥ 400 mg/L
Theophylline	All		20.1 – 24.9 mg/L	All		≥ 25 mg/L
Tobramycin, Trough				All		> 2.0 mg/L
Tacrolimus (FK 506)						> 25 mcg/L
Valproic Acid	All		101 - 149 mg/L	All		≥ 150 mg/L
Vancomycin, Peak				All		> 60.0 mg/L
Vancomycin, Trough				All		> 20.0 mg/L

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CRITICAL AND ALERT VALUES TABLE

MICROBIOLOGY

Analyte	ALERT			CRITICAL		
	Age ¹	Low	High	Age ¹	Low	High
<i>Bacillus anthracis</i> , culture, nucleic acid or Ag test				All		Positive
<i>Bordetella pertussis</i> , culture, nucleic acid, or Ag test	All		Positive			
<i>Brucella sp.</i> , culture, nucleic acid or Ag test				All		Positive
<i>Chlamydia trachomatis</i> , culture, nucleic acid or Ag test	All		Positive			
<i>Clostridium difficile</i> . toxin A, B, A+B or toxigenic culture, stool	All		Positive			
<i>Corynebacterium diphtheriae</i> , nasopharynx culture	All		Positive			
<i>Cryptococcus</i> Ag, serum & CSF				All		Positive
Viral culture, nucleic acid or Ag test: CSF, blood & normally sterile body site or cavity (including pericardial, pleural, synovial, and non-dialysate peritoneal fluid)	All		Positive (except for HIV, HBV, or HCV)			
Culture: bronchoalveolar lavage, bronchial wash	All		Positive for pathogenic bacteria, fungi, viruses or parasites			

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MICROBIOLOGY

Analyte	ALERT			CRITICAL		
	Age ¹	Low	High	Age ¹	Low	High
Culture: CSF, blood, surgical tissue specimens and normally sterile body site or cavity (pericardial, pleural fluid, synovial or non-dialysate peritoneal fluid)				All		Positive for bacteria, fungi or parasites
<i>E. coli</i> 0157, culture, stool				All		Positive
<i>E. coli</i> , Shiga toxin, EIA, stool				All		Positive
<i>Francisella tularensis</i> , culture, nucleic acid, or antigen test				All		Positive
Gram or other Stain: CSF, blood, surgical tissue and sterile body site or cavity (pericardial, pleural fluid, synovial or non-dialysate peritoneal fluid)				All		Positive for bacteria, fungi or parasites
Influenza A and/or B, culture, nucleic acid, or antigen test	All		Positive			
<i>Legionella sp.</i> , culture, nucleic acid, or antigen test	All		Positive			
Malaria and Babesia	All	Positive for Babesia and/or Plasmodium species other than <i>P. falciparum</i>		All	Positive for <i>Plasmodium falciparum</i> or "Plasmodium species"	
Pathogenic <i>Mycobacteria sp.</i> , culture, stain or nucleic acid test	All		Positive			

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MICROBIOLOGY

Analyte	ALERT			CRITICAL		
	Age ¹	Low	High	Age ¹	Low	High
Mycology isolates and stains (not hair, nail, or skin scraping). Notify if blood, tissue, skin biopsy or normally sterile body cavity fluid				All		Positive (e.g., <i>Histoplasma</i> , <i>Blastomyces</i> , <i>Coccidioides</i> , <i>Paracoccidioides</i> , <i>Cryptococcus</i> or <i>Candida</i>)
<i>Neisseria gonorrhoeae</i> , culture or nucleic acid test	All		Positive			
Ova and Parasite	All		Positive			
<i>Pneumocystis carinii</i> , special stain or antigen test.				All		Positive
Respiratory syncytial virus, culture, nucleic acid or antigen test	> 1 y		Positive	≤ 1 y		Positive
Rotavirus, Ag test	All		Positive			
Stool Culture, <i>Shigella sp.</i> , <i>Salmonella sp.</i> or <i>Campylobacter sp.</i>	All		Positive			
<i>Streptococcus</i> , Group A	All		Positive			
<i>Streptococcus</i> , Group B, culture or nucleic acid test	< 1 y		Positive			
<i>Streptococcus pneumoniae</i> and other <i>Streptococcus</i> species potentially resistant to one or more antimicrobials	All		Positive			
<i>Vibrio sp.</i> , culture, stool	All		Positive			
<i>Yersinia enterocolitica</i> , culture, stool	All		Positive			
<i>Yersinia pestis</i> , culture, nucleic acid, or antigen test				All		Positive
<i>Ureaplasma urealyticum</i> , culture, respiratory				< 1 m		Positive

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