

CRITICAL VALUE LIST

Critical Values

A critical value is one that represents a pathophysiological state at such variance with normal as to be life-threatening unless something is done promptly, and for which some corrective action could be taken.

WDL has procedures for immediate notification to the provider or another member of the patient's care team. Phone notification includes 2 unique patient identifiers (name and medical record number or date of birth), critical value (test and test result), and name of person calling the result. Read-back of the information provided is required and documented.

CHEMISTRY				
Test	Age	Critical Low	Critical High	Units
CO2, Total		≤ 12	≥ 40	mmol/L
Bilirubin, Direct	≤ 18 years		≥ 10	mg/dL
Bilirubin, Total	≤ 18 years		≥ 15	mg/dL
Calcium, Ionized		< 0.75	> 1.6	mmol/L
Calcium, Total		≤ 7.0	≥ 12.0	mg/dL
FCO-Hb (Carbon Monoxide)			≥ 15	%
Glucose	< 1 month	≤ 44	≥ 250	mg/dL
	1 to 6 months	< 50	≥ 400	mg/dL
	> 6 months	< 50	≥ 500	mg/dL
Glucose, CSF		≤ 40		mg/dL
Lactic Acid			≥ 4	mmol/L
Magnesium		≤ 1.0	≥ 5.0	mg/dL
Magnesium L & D		≤ 1.0	≥ 9.0	mg/dL
pCO2, All Venous types and Capillary		≤ 20	≥ 60	mmHg
pCO2, Arterial		≤ 25	≥ 60	mmHg
pH, All Venous types and Capillary		≤ 7.20	≥ 7.55	
pH, Arterial		≤ 7.25	≥ 7.55	
pH, Umbilical Cord (Arterial or Venous)	Neonatal	≤ 7.10		
pO2, Arterial		≤ 55		mmHg
Potassium		≤ 2.8	≥ 6.0	mmol/L
Sodium		≤ 125	≥ 155	mmol/L
Troponin HS			≥ 100	ng/L

COAGULATION

TEST	CRITICAL VALUE	
Fibrinogen	< 100	mg/dL
Activated Partial Thromboplastin Time (APTT)	> 100	Seconds
Prothrombin Time (PT)/ INR	> 5.0	INR

HEMATOLOGY

Test	Age	Critical Low	Critical High	Units
Hemoglobin		≤ 6.0	≥ 19.0	g/dL
	0 days to 1 week	≤ 6.0	≥ 22.5	g/dL
	1 week to 1 month	≤ 6.0	≥ 20.5	g/dL
	1 month to 6 months	≤ 6.0	≥ 20.0	g/dL
Hematocrit		≤ 20	≥ 60	%
	0 days to 1 week	≤ 20	> 67	%
	1 week to 1 month	≤ 20	> 66	%
	1 month to 6 months	≤ 20	≥ 60	%
Platelet Count (Birth to Adult)		≤ 25.0 x 10 ³	≥ 1,000.0 x 10 ³	µL
PMN	0 days to 1 month	≤ 20		%
White Blood Cell Count (Birth to Adult)		≤ 1.2 x 10 ³	≥ 40.0 x 10 ³	µL

MICROBIOLOGY

Test	Critical Result
Blood Culture	<ul style="list-style-type: none"> • New patient positive • New organism on previous positive patient • Previously positive patient with last positive received over 1 week earlier
CSF Culture	<ul style="list-style-type: none"> • New patient positive • New organism on previous positive patient • Previously positive patient with last positive received over 1 week earlier

TOXICOLOGY

DRUG	TOXIC LEVEL	
Acetaminophen	≥ 150	mg/L
Acetone	≥ 50	mg/dL
Carbamazepine (Tegretol)	≥ 15	mg/L
Cyclosporin, Parent Compound	≥ 700	ng/mL
Cyclosporin, 2 Hour	> 2250	ng/mL
Digoxin	≥ 2.5	ng/mL
Ethanol	≥ 0.30	g/dL
Ethylene glycol	≥ 10	mg/dL
Everolimus	≥ 15	ng/mL
Isopropanol	≥ 10	mg/dL
Lacosamide	≥ 20	µg/dL
Lead	≤ 18 years ≥ 45 > 18 years ≥ 70	µg/dL µg/dL
Levetiracetam	≥ 100	µg/dL
Lidocaine	≥ 6	mg/L
Lithium	≥ 1.5	mmol/L
Methanol	≥ 20	mg/dL
Methotrexate	> 50	µmol/L
Phenobarbital	≥ 40	mg/L
Phenytoin	≥ 25	mg/L
Procainamide + NAPA	≥ 30	mg/L
Procainamide	≥ 16	mg/L
NAPA	≥ 20	mg/L
Salicylate	≥ 30	mg/dL
Sirolimus	≥ 20	ng/mL
Tacrolimus (FK506)	≥ 20	ng/mL
Topiramate	≥ 35	µg/dL
Theophylline	≥ 20	mg/L
Valproic Acid, Free	≥ 27	µg/mL
Valproic Acid, Total	≥ 150	mg/L

Zonisamide	≥ 60	$\mu\text{g/mL}$
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