

# Critical Values

Labcorp defines critical (panic) results as laboratory test results that exceed established limit(s) (high or low) as defined by the laboratory for certain analytes as listed in the “Critical (Panic) Limits.” Critical results are considered life threatening and require immediate notification of the physician, the physician’s representative, the ordering entity, or other clinical personnel responsible for the patient’s care. Critical results may also be referred to as “panic” values.

Critical (Panic) results are communicated to the physician, the physician’s representative, the ordering entity or other clinical personnel responsible for patient care once the result has been verified, and the patient’s result has been entered into the laboratory computer system. The reference range listed are the adult limits unless otherwise specified.

Note that abnormal results are not considered Critical Values. Results that are outside the laboratory’s established reference interval may be considered abnormal. “Abnormal” and “critical” are not to be used interchangeably.

Test Name	Age	Reference Interval	Default call Low <	Default call High >	Units
<b>Chemistry</b>					
Bilirubin, Total	24 hours old	0.0 - 8.0			
	48 hours old	0.0 - 13.2			
	72 hours old	0.0 - 15.6		17.0	mg/dL
	96 hours old to 1 month old	0.0 - 16.6			
	1 month and older to adults	0.0 - 1.2			
Bilirubin, Total, Neonatal	24 hours old	0.0 - 8.0			
	48 hours old	0.0 - 13.2			
	72 hours old	0.0 - 15.6		17.0	mg/dL
	96 hours old to 1 month old	0.0 - 16.6			
	1 month and older to adults	0.0 - 1.2			
Calcium	0 - 10 days	8.6 - 10.4			
	11 days - 1 year	9.2 - 11.0			
	2 - 11 years	9.1 - 10.5			
	12 - 17 years	8.9 - 10.4	7.0	13.0	mg/dL
	18 - 59 years	8.7 - 10.2			
	>59 years	Male: 8.6 - 10.2 Female: 8.7 - 10.3			
Creatine Kinase, MB		Male: 0.0 - 10.4 Female: 0.0 - 5.3		Male: 10.4 Female: 5.3	ng/mL

Test Name	Age	Reference Interval	Default call Low <	Default call High >	Units
<b>Chemistry—Continued</b>					
Creatine Kinase, Total	0 - 7 days	Male: 59 - 1111 Female: 55 - 777			
	8 - 30 days	Male: 51 - 168 Female: 37 - 151			
	1 month - 1 year	Male: 57 - 301 Female: 50 - 263			
	2 - 12 years	Male: 53 - 229 Female: 45 - 198			
	13 - 17 years	Male: 53 - 446 Female: 32 - 182			
	18 - 50 years	Male: 49 - 439 Female: 32 - 182			
	51 - 80 years	Male: 41 - 331 Female: 32 - 182			
	>80 years	Male: 30 - 208 Female: 26 - 161			
Glucose		70 - 99	40	500	mg/dL
Potassium	0 - 7 days	3.7 - 5.2			
	8 - 30 days	3.7 - 6.4			
	1 - 6 months	3.8 - 6.0	2.5	6.5	mmol/L
	7 months - 1 year	3.8 - 5.3			
	>1 year	3.5 - 5.2			
Sodium		134 - 144	120	160	mmol/L
<b>Hematology/Coagulation</b>					
ADAMTS13 Activity		>66.8	30.0		%
Fibrinogen Activity	0 - 6 months	Not Estab.			
	7 months - 16 years	180 - 383	80	999	mg/dL
	>16 years	193 - 507			
Fibrinogen Antigen	0 - 1 year	116 - 349			
	2 - 5 years	Male: 176 - 354 Female: 189 - 395			
	6 - 17 years	191 - 416	80	999	mg/dL
	18 - 50 years	206 - 478			
	>50 years	233 - 496			
Hematocrit	0 - 7 days	31.9 - 57.2			
	8 - 30 days	30.7 - 53.7			
	31 - 90 days	26.6 - 41.0			
	91 days - 11 months	31.0 - 41.0			
	1 - 7 years	32.4 - 43.3	18.1	64.4	%
	8 - 12 years	34.8 - 45.8			
	>12 years	Male: 37.5 - 51.0 Female: 34.0 - 46.6			

Test Name	Age	Reference Interval	Default call Low <	Default call High >	Units
<b>Hematology/Coagulation – Continued</b>					
Hemoglobin	0 - 7 days	10.7 - 20.5	6.1	21.4	g/dL
	8 - 30 days	10.5 - 18.7			
	31 - 90 days	8.8 - 14.3			
	91 days - 11 months	10.4 - 14.1			
	1 - 7 years	10.9 - 14.8			
	8 - 12 years	11.7 - 15.7			
	13 - 15 years	Male: 12.6 - 17.7 Female: 11.1 - 15.9			
	>15 years	Male: 13.0 - 17.7 Female: 11.1 - 15.9			
INR	0 - 1 month	0.9 - 1.4		4.9	
	>1 month	0.9 - 1.2			
aPTT	0 - 3 days	Not Estab.		89	sec
	4 days - 6 months	26 - 38			
	7 months - 17 years	26 - 35			
	>17 years	24 - 33			
Neutrophils, absolute	0 - 7 days	1.2 - 6.1	0.5	999	x10E3/uL
	8 - 30 days	1.2 - 4.8			
	31 - 90 days	0.8 - 3.8			
	91 days - 11 months	1.0 - 4.0			
	1 - 7 years	0.9 - 5.4			
	8 - 12 years	1.2 - 6.0			
	>12 years	1.4 - 7.0			
Platelets	0 - 7 days	140 - 396	21	999	x10E3/uL
	8 - 30 days	139 - 531			
	31 days - 999 years	150 - 450			
WBC	0 - 7 days	3.6 - 12.5	1.1	49.9	x10E3/uL
	8 - 30 days	4.5 - 14.4			
	31 - 90 days	4.4 - 13.1			
	91 days - 11 months	5.2 - 14.5			
	1 - 7 years	4.3 - 12.4			
	8 - 12 years	3.7 - 10.5			
	>12 years	3.4 - 10.8			
<b>TDM / Toxicology</b>					
Amitriptyline + Nortriptyline Metabolite		80 - 200		1,000	ng/mL
Carbamazepine		4.0 - 12.0		20.0	ug/mL
Digoxin		0.5 - 0.9		2.5	ng/mL
Ethosuximide		40 - 100		200	ug/mL
Lithium		0.5 - 1.2		1.5	mmol/L

Test Name	Age	Reference Interval	Default call Low <	Default call High >	Units
<b>TDM / Toxicology – Continued</b>					
Primidone		5.0 - 12.0		24.0	ug/mL
Phenobarbital		15 - 40		60	ug/mL
Phenytoin	0 - 3 months	6.0 - 14.0		40.0	ug/mL
	>3 months	10.0 - 20.0			
Theophylline	0 - 1 month	5.0 - 10.0		25.0	ug/mL
	>1 month	10.0 - 20.0			
Valproic Acid		50 - 100		200	ug/mL
Vancomycin, Peak		25.0 - 40.0		80.0	ug/mL
Vancomycin, Trough		10.0 - 15.0		80.0	ug/mL
Vancomycin, Random		5.0 - 40.0		80.0	ug/mL

### Qualitative or Non Numeric Panic Values

- Any positive gram stain, fungal stain, cryptococcal antigen or positive culture result on CSF
- Any positive gram stain or culture result from a blood culture
- Any positive gram stain or fungal stain from a normally sterile body fluid specimen
- Any positive culture from a normally sterile body fluid specimen
- Any seasonal (Nov 1 – April 30) STAT RSV EIA result
- Definitive identification of any culture isolate considered potentially life-threatening or designated as a select agent, ie, Brucella, Francisella
- Positive Shiga toxin EIA result from a patient <18 or >62 years old
- Any intracellular or extracellular blood parasite
- For Hematology stained slides, any neutrophages with phagocytosed (intracellular) microorganisms (bacteria, yeast, etc.) found in a normally sterile body fluid, ie, CSF, synovial, serous, amniotic, and/or blood specimen (Reported when present in neutrophils only)
- Any “No Clot Detected” result for prothrombin time or activated partial thromboplastin time (aPTT)
- LD Isoenzyme Interpretation – The LDH isoenzyme pattern demonstrates LD1 greater than LD2
- Any positive HSV result on CSF