

MAINEHEALTH CRITICAL LAB VALUES

All values in this chart have been reviewed and approved by MaineHealth Medical Executive, CMO, and CNO councils.

HEMATOLOGY	AGE	LOW	HIGH	CONDITION	
				Inpatient	Outpatient
White Blood Count, Blood thou/L	ALL	≤ 1.9	≥ 50.1	Initial only *	Call all, except known CLL/CML oncology patients with a critical WBC within the last year.
Hemoglobin, Blood g/dL	ALL	≤ 6.5		Call all	Call all
Hematocrit, Blood %	ALL	≤ 19.0		Call all	Call all
Platelet count, Blood thou/L	ALL	≤ 39	≥ 1000	Initial only *	Call all
Blast Cells, Blood %	ALL		≥ 6.0	Initial only *	Call all
Blast Cells, Cerebral Spinal fluid %	ALL		≥ 1.0	Initial only *	Call all
Schistocytes	ALL		3+	Call all	Call all
Blood Pathogens	ALL	All RBC and WBC parasites by morphology		Initial only *	Call all
Wright -stained slides, Blood	ALL	Neutrophils with phagocytosed (intracellular) microorganisms (bacteria, yeast, etc) found in a normally sterile body fluid, i.e CSF, ventricular, synovial, serous fluids, and/or blood specimen. Only call if in neutrophils.		Call all	Call all
Malignant Cells, Body Fluids	ALL	Refer smear to Pathologist			
*For hospital Inpatients, once the "Initial" critical value is called, additional calls are not required for same admission.					
COAGULATION	AGE	LOW	HIGH	CONDITION	
				Inpatient	Outpatient
INR	ALL		≥ 5.0	Call all	Call all
PTT sec	ALL		≥ 150 Inpatients	Call all	
	ALL		≥ 60 Outpatients		Call all
Fibrinogen mg/dL	ALL	≤ 99		Call all	Call all
VOLATILES	AGE	LOW	HIGH	CONDITION	
				Inpatient	Outpatient
Ethylene Glycol mg/dL	ALL		≥ 20		Call all
Acetone mg/dL	ALL		≥ 20		Call all
Isopropyl Alcohol mg/dL	ALL		≥ 20		Call all
Methanol mg/dL	ALL		≥ 20		Call all
BLOOD GAS	AGE	LOW	HIGH	CONDITION	
				Inpatient	Outpatient
pO2 mm Hg	ALL	≤ 50		Arterial or Capillary, Call all	
pCO2 mm Hg	ALL	≤ 20	≥ 70	Arterial or Capillary, Call all	
CarboxyHemoglobin %	ALL		≥ 15.0	Call all	
MetHemoglobin %	ALL		≥ 5.0	Call all	
pH arterial	ALL	≤ 7.20	≥ 7.60	Arterial or Capillary, Call all	
pH venous	ALL	≤ 7.20	≥ 7.50	Venous, Call all	
pH venous Cord Blood	ALL	≤ 6.99		Venous, Call all	
Hemoglobin g/dL	ALL	≤ 6.5		Call all	

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8/14/23

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4/14/2026

LIVE DATE:
9/19/23

LIVE DATE:
12/2/2024

LIVE DATE:
10/24/23

CHEMISTRY	AGE	LOW	HIGH	CONDITION
Sodium mEq/L	ALL	≤ 119	≥ 161	Call all
Potassium mEq/L	ALL	≤ 2.7	≥ 6.3	Call all
Glucose mg/dL	≤ 6 MONTHS	≤ 44	≥ 201	Call all
	> 6 MONTHS	≤ 44	≥ 501	Call all
Calcium mg/dL	ALL	≤ 5.9	≥ 13.1	Call all
Total Bilirubin mg/dL	≤ 6 MONTHS		≥ 15.1	Call all
Magnesium mg/dL	ALL	≤ 0.9	≥ 8.1	Call all
Phosphorus mg/dL	ALL	≤ 1.0	≥ 9.1	Call all
Lactate mmol/L	ALL		≥ 4.0	Initial only* Call all
Sweat Chloride mmol/L	ALL		≥ 30.0	Call all
hs Troponin T ng/L	ALL		> 50	Troponin results are not called as critical, but require a second tier of flagging for interpretation. Please see the MaineHealth Chest Pain Algorithm for help in interpretation.
hs Troponin I ng/L (backup method)	ALL		≥ 65	
Ionized Calcium mmol/L	ALL	≤ 0.75	≥ 1.60	
*For hospital Inpatients, once the "Initial" critical value is called, additional calls are not required for same admission.				
TOXICOLOGY / THERAPEUTIC DRUGS	AGE	LOW	HIGH	CONDITION
ACETA ug/mL	ALL		≥ 250.1	Call all
CYA (Cyclosporine) ng/mL	ALL		≥ 301	Call all
DIG ng/mL	ALL		≥ 2.6	Call all
DILAN ug/mL	ALL		≥ 35.1	Call all
ETOH mg/dL	ALL		≥ 401	Call all
FPHNY ug/mL	ALL		≥ 3.1	Call all
GENT trough ug/mL	ALL		≥ 2.1	Call all
GENT peak ug/mL	ALL		≥ 20.1	Call all
GENT random ug/mL	ALL		≥ 2.1	Call all
LITH mEq/L	≤ 65 YEARS		≥ 1.5	Call all
LITH mEq/L	>65 YEARS		≥ 1.3	Call all
MTX umol/L	ALL		≥ 10.1	Call all
PHENO ug/mL	ALL		≥ 60.1	Call all
SALIC mg/L	ALL		≥ 400.1	Call all
TACRO ng/mL	ALL		≥ 20.1	Call all
TEG (Carbamazepine) ug/mL	ALL		≥ 15.1	Call all
THEO ug/mL	ALL		≥ 20.1	Call all
TOBRA trough ug/mL	ALL		≥ 2.1	Call all
TOBRA peak ug/mL	ALL		≥ 25.1	Call all
TOBCF cystic fibrosis ug/mL	ALL		≥ 30.1	Call all
TOBRA random ug/mL	ALL		≥ 2.1	Call all
VALP ug/mL	ALL		≥ 150.1	Call all
VANC trough ug/mL	ALL		≥ 30.1	Call all
VANC random ug/mL	ALL		≥ 50.1	Call all

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1/30/2024UPDATED:
4/7/2026

Infectious disease			
(culture or molecular pathology)	AGE	VALUE	CONDITION
GRAM STAIN	ALL	All positives on sterile body sites/fluids to include: Blood CSF and Ventricular fluid Synovial fluid Serous fluids - pleural, peritoneal, pericardial Bone Marrow Biopsy	<i>(Excludes urine, gastrointestinal fluid and Bronchial lavage). Include source and site when calling critical values.</i>
CULTURE	ALL	All positives on sterile body sites/fluids to include: Blood CSF and Ventricular fluid Synovial fluid Serous fluids - pleural, peritoneal, pericardial Bone Marrow Biopsy	<i>(Excludes urine, gastrointestinal fluid and Bronchial lavage). Include source and site when calling critical values.</i>
BLOOD CULTURE	ALL	POSITIVE	<i>Each positive set within a series needs to be called. For subsequent positive blood cultures in the same set that demonstrate the same organism, verify that the initial was called and document that a previous positive in the same set was called. If the second bottle in the set demonstrates a different organism in the Gram Stain, this result needs to be called.</i>
BLOOD CULTURE including Nanosphere or Pheno	ALL	All rapid identification results	<i>Call all</i>
Acid-fast bacilli	ALL	Positive smear/culture	<i>Call all</i>
BACTERIAL ANTIGEN SCREEN	ALL	Positive CSF and Ventricular fluid	<i>Call all</i>
CRYPTOCOCCAL ANTIGEN	ALL	Positive	<i>Call all</i>
Babesia Microti	ALL	Positive	<i>Initial only</i>
HSV PCR	ALL	Positive sterile body fluid, including CSF and blood	<i>Call all, excluding urine</i>
Enterovirus	ALL	Positive CSF and Ventricular fluid	<i>Call all</i>
Any assay performed on CSF/brain	ALL	Any Positive virus, bacteria, fungus	<i>Call all</i>

LIVE DATE:
6/1/2024UPDATED:
4/14/2026