

August 31, 2022

Dear Valued Client:

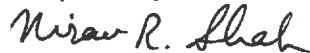
Effective September 15, 2022, certain critical values used by American Health Associates labs (AHA) will change. We are discontinuing a few critical values for reporting results, and altering others by matching our reporting to that used by other major commercial reference labs. Please refer to the table below for affected tests. All other critical values will remain the same; an updated full list is appended to the end of this memo.

Department	Test	Units	Current Critical Value	New Critical Value
Chemistry	Amylase	IU/L	>300	No Critical Value
Chemistry	Carbon Dioxide	mEq/L	≤10 or >40	≤10 or >45
Chemistry	CK	U/L	>5000	>10,000
Chemistry	Lipase	IU/L	>200	No Critical Value
Chemistry	Lithium	mEq/L	>1.6	>2.0
Hematology	HGB	g/dL	<7.5 or >21.0	≤7.0 or ≥21.0
Microbiology	C-Diff		Positive	No Critical Value
Microbiology	MRSA		Positive	No Critical Value

Please direct any questions or concerns you may have to your AHA customer account representative or AHA client service representative. At AHA we are committed to bringing excellent quality care to you and your patients.

Thank you for making AHA your business partner.

Respectfully,



Nirav R. Shah, MD, MPH  
 Chief Medical Officer  
 American Health Associates



**American Health Associates Critical Values List - Updated September 15, 2022**

Section	Test	Critical Value	Units	Section	Test	Critical Value	Units
Heme/Coag	WBC	≤2.0, ≥40.0	K/mm <sup>3</sup>	Chem/TDM	Amikacin, Pk	≥35	µg/mL
Heme/Coag	ABS NEUTRO	≤0.5	K/mm <sup>3</sup>	Chem/TDM	Amikacin, Tr	≥10	µg/mL
Heme/Coag	HGB	≤7.0, ≥21.0	g/dL	Chem/TDM	Carbamazepine	≥18	µg/mL
Heme/Coag	Platelets	≤50, ≥1000	K/mm <sup>3</sup>	Chem/TDM	Digoxin	≥2.5	µg/mL
Heme/Coag	INR	≥5.0		Chem/TDM	Dilantin	≥30.0	µg/mL
Heme/Coag	aPTT	≥100	Seconds	Chem/TDM	Gentamicin Pk	≥10.0	µg/mL
				Chem/TDM	Gentamicin Tr	≥2.0	µg/mL
Chem/Imm	Troponin I	≥0.05	ng/mL	Chem/TDM	Lithium	≥2.0	meq/L
				Chem/TDM	Phenobarbital	≥50.0	µg/mL
Chemistry	Ammonia	≥200	µmol/L	Chem/TDM	Primidone	≥15.0	µg/mL
Chemistry	BUN	≥100	mg/dL	Chem/TDM	Theophylline	≥20.0	µg/mL
Chemistry	Calcium	≤6.0, ≥13.0	mg/dL	Chem/TDM	Tobramycin Pk	≥10.0	µg/mL
Chemistry	CO <sub>2</sub>	≤10, ≥45	mEq/L	Chem/TDM	Tobramycin Tr	≥2.0	µg/mL
Chemistry	CPK (CK)	>10,000	U/L	Chem/TDM	Valproic Acid	≥125.0	µg/mL
Chemistry	CK-MB	>5.0	ng/mL	Chem/TDM	Vancomycin Pk	≥50.0	µg/mL
Chemistry	Creatinine	>8.0	mg/dL	Chem/TDM	Vancomycin Tr	≥30.0	µg/mL
Chemistry	Glucose	≤40, ≥500	mg/dL				
Chemistry	Magnesium	≤1.0, ≥5.0	mEq/L	Micro	Blood Cultures	Any Positive	N/A
Chemistry	Phosphorus	≤1.0, ≥9.0	mg/dL	Micro	CRE culture	Any Positive	N/A
Chemistry	Potassium	≤2.8, ≥6.1	mEq/L	Micro	ESBL culture	Any Positive	N/A
Chemistry	Sodium	≤120, ≥160	mEq/L	Micro	Group A Strep	Any Positive	N/A
				Micro	MDRO Culture	Any Positive	N/A
Virology	COVID-19	Positive	N/A	Micro	Stool Pathogen	Any Positive	N/A
				Micro	VRE Culture	Any Positive	N/A
				Micro	Candida auris	Any Positive	N/A

## **Frequently Asked Questions**

### **AHA Critical Values changes - September 2022**

1. Question: Why did AHA make changes to critical values?

Answer: We changed part of our critical call values to be consistent with the values used by LabCorp, Quest Diagnostics, Mayo Medical Labs and ARUP. These changes may reduce the number of medical actions needed for non-life-threatening values.

2. Question: Why were critical values withdrawn for Amylase and Lipase?

Answer: During a regular review process, we found out that the critical values we used for amylase and lipase were out of date. Subsequently, we discovered that no other labs report critical values for amylase and lipase.

3. Question: Why were critical values withdrawn for C. diff and MRSA?

Answer: During a regular review process, we found out that the critical values we used for C. diff and MRSA were out of date. Subsequently, we discovered that no other labs report critical values for C. diff and MRSA.

4. Question: Why was the critical value for HGB dropped lower to  $\leq 7.0$ ? Is that the limit for transfusion?

Answer: This change better represents a low critical value for our older, frail patient population as compared to the general population. We are maintaining this level for notification in an abundance of caution; several other major labs (LabCorp, Quest, Mayo) only notify at a level of  $\leq 6$ .

5. Question: Why is the new critical value for CK so high at  $>10,000$ ?

Answer: This value was selected to align with major national labs, e.g. both LabCorp and Mayo use 10,000.