

TEST UPDATE

Chemistry Critical Value Changes

UVMHN

Effective 3/17/2025, the critical value settings on several analytes will be updated in conjunction with the Go-Live of the new high volume chemistry analyzers for Elizabethtown Community Hospital/Ticonderoga. These changes further the goal of complete alignment of UVMHN into a single chemistry platform. The changes are as follows:

Analyte	Age Range	Old Critical Value	New Critical Value
Acetaminophen	All Ages	>100 ug/mL	≥150 ug/mL
Ammonia	0-2 Years	≥200 umol/L	≥150 umol/L
Bilirubin Conjugated	Expanded to 0-18 Years	≥1.0 mg/dL	Same
Creatinine	0-18 Years	≥3.0 mg/dL	≥2.0 mg/dL
Delta Creatinine	0-18 Years	≥1.0 mg/dL increase	≥0.3 mg/dL increase
Ionized Calcium	0-6 Months	<0.8 and >1.4 mmol/L	<0.85 and >1.6 mmol/L
	6 Months-18 Years	<0.8 and >1.6 mmol/L	<0.8 and >1.45 mmol/L
Glucose	0-1 Day	<40 and >180 mg/dL	Same
	1-7 Days	<50 and >500 mg/dL	<40 and >180 mg/dL
	7 Days- 18 Years	<50 and >500 mg/dL	<50 and >300 mg/dL
	18 Years and up	<50 and >500 mg/dL	≤55 and >500 mg/dL
Glucose Tolerance Test and Gestational Screens	New Range 0-18 Years	N/A	<50 and >300 mg/dL
	18 Years and up	<50 and >500 mg/dL	≤55 and >500 mg/dL
Magnesium	All Ages	<1.0 mg/dL	≤1.0 mg/dL
Valproate	New Range 0-18 Years	N/A	≥125 ug/mL

***Please note that the Creatinine and Ionized Calcium changes apply not only to measurements in the Main Laboratory but also on POCT devices.

***Glucose changes apply only to the Main Laboratory at this time. Discussion with individual user groups is required to apply these changes to POCT Glucometers, iSTATs, and epocs as those instruments are patient age agnostic when displaying critical values to the end user on the device. Thus, customization at the device level is required, which requires several logistical considerations.

If you have any questions or concerns, please reach out to the Network Medical Director of Clinical Chemistry (clayton.wilburn@uvmhealth.org).

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111 Colchester Avenue | Mail Stop: 233MP1 | Burlington, Vermont 05401

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