

259.259 Critical Value Reporting

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Approval and Periodic Review Signatures

Type	Description	Date	Version	Performed By	Notes
Approval	Lab Director	3/12/2025	14.0	<i>Vlada Alexeeva, MD</i> Vlada Alexeeva MD	
Approval	Lab Administrator	3/11/2025	14.0	Lia McFarline	

Signatures from prior revisions are not listed.

Approvals and periodic reviews that occurred before this document was added to Document Control may not be listed.

Prior History

Critical Value Reporting

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Employee Initial Review

Employee's Name	Date of Initial Review by the Employee	Employee's Initials	Employee's Signature
Michelle Brutowski Brutkoski	1/1/11	MI	Michelle Brutkoski
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Kathleen Moore	12/23/10	Kem	Kathleen Moore
Liza Pellerin	12/23/10	LHP	Liza Pellerin
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Sue Bergmans,	2/25/10	S	Sue Bergmans
Kris Beaudin,	08/05/10	KB	Kris Beaudin
Christine Cook	12/23/10	CC	Christine Cook
Steve Cooper	05/20/2011	SC	Steve Cooper
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Don Guptill	12-23-10	DG	Don Guptill
Larry Lawson	12-24-10	LZ	Larry Lawson
Karen Lykins	05/26/11	KSL	Karen Lykins
Beverly Rivers	12/25/2010	BR	Beverly Rivers
Ray Rovi	23 Dec 10	R	Ray Rovi
Dawn Smith	Jan 12 2011	DS	Dawn Smith
Nancy Wolmuth	12/24/10	NW	Nancy Wolmuth
Wendi Turner	12/23/10	WT	Wendi Turner
Brian Lee	5-4-11	BL	Brian Lee

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Employee Initial Review

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Karen Rouse	5-12-11	KR	Karen Rouse
Heather Flavell	6/27/12	hjf	Heather Flavell
Kathleen Hucko	7/25/12	KH	Kathleen Hucko
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Linda Hampton	9/5/12	L.H	Linda Hampton
Allison Heibles	10/11/12	AH	Allison Heibles
Dorothy Strull	11/27/12	DS	Dorothy Strull

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Critical Value Reporting

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Critical Value Reporting

GENERAL

PURPOSE

- The Critical Value List is a valuable working tool that specifies which tests and ranges of results constitute a critical value and require immediate notification of the results to the patient's physician. The list has been approved by the pathologist and by the medical staff of UVM Health Network/Porter Medical Center/Laboratory. The critical values list can be found as APPENDIX A of this procedure.

RESPONSIBILITY

It is the responsibility of the technician/technologist to:

- Review and verify patient results in a timely manner.
- Notify the physician or **appropriate clinical individual** of the critical value immediately and document in the computer that notification has been done. [COM.30000](#)
- If an inpatient has been discharged, notify the ordering physician.
- Notify the “on call” physician during evening, nights, or weekends. As a courtesy to the 'on call' physician, any information on the original order may be useful (home telephone, diagnosis, address), so have the requisition available when you make the call. If the computer has any prior results on the patient, the physician may also be interested in this information.
- Documentation must include the **name** (first and last name), the **credentials** and the **location** of the Physician, or **appropriate clinical individual** receiving and reading back the results. The date, time, and your name are automatically documented by computer. [COM.30100](#)
- ***Be sure the results are read back to you by the person receiving the results.***
- All critical value notifications will be documented in the computer even if the responsible party is not contacted until the next day.
- Faxing and/or printing report to physician or department is not sufficient notification of a critical value.
 - There is no guarantee that report will arrive or that anyone will look at the report. You must call and notify a responsible party of critical value.

Critical Value Reporting

PROCEDURE

1. If the critical value is obtained on testing performed at UVMHN Porter Medical Center Laboratory, immediately verify the result.

If	Then
Critical value is obtained in Blood Banking(Antibody Screen POS)	<ul style="list-style-type: none"> • Repeat the test(s) using either the primary tube or a new aliquot of the patient's sample.
Critical value is in Hematology	<ul style="list-style-type: none"> • Rerun well-mixed sample and/or make a second slide and review. Analyzer auto reruns
Critical value in Microbiology, Chemistry, Coag	<ul style="list-style-type: none"> • Recheck labels, reagents, etc. to verify correct patient sample, correct reagents, etc. • It is up to the discretion of Tech and at request of provider, if it is to be repeated

2. For both critical values obtained on testing performed at UVMHN Porter Medical Center and Reference Laboratories, determine the patient's location for notification and documentation purposes. **When calling the critical value, prior to providing the appropriate clinical individual with result, request their full name (first and last) and credentials.**

If	Then
Patient is an in-house patient	<ul style="list-style-type: none"> • Call the respective in-house department and state you have critical values that need to be relayed to patient's physician. • Results must be given to appropriate clinical individual.
Patient is an HPHRC resident	<ul style="list-style-type: none"> • Notify either the primary care physician or the appropriate clinical individual.
Patient has been discharged	<ul style="list-style-type: none"> • Notify the ordering/on-call physician
Patient is an outpatient and it is during normal office hours	<ul style="list-style-type: none"> • Call office and appropriate clinical individual. • State that the critical values must be brought to the physician's attention immediately
UVMHC Hematology Oncology	<ul style="list-style-type: none"> • Call the office and give critical result information to the appropriate clinical individual or patient access designee.
Patient is an outpatient and it is before/after normal office hours	<ul style="list-style-type: none"> • Notify the physician on-call.

3. Using the **CommLog** function in the LIS - record the name (first and last name), the credentials and the location of the physician or **clinical individual** receiving and reading back the results. The date, time, and your name are automatically documented by computer.
4. **If notification cannot be completed within 30 minutes-**

Critical Value Reporting

- a. **Technologist should contact call center again for a second page.**
 - b. **If after 2 attempts, there is no response, then they must call the center one more time asking for an additional person on call to be paged.**
 - c. **Lab will make three attempts. If after the third attempt, there has been no call back, please reach out to the Emergency Department and explain your situation and ask for their help with getting ahold of the provider or patient.**
 - d. **Document in Comm log, all of your attempts and the start time of first phone call to make sure we are in compliance of starting the communication within 30 minutes of receipt of critical.**
5. *NOTE: The exception to this is CSF cell count/differentials – may take up to 1 hr. to report.*

REFERENCES

- CAP Standards: COM.30000, COM.30100

DOCUMENT AUTHORS

- Edited By: Ashley LaBerge, MLS (ASCP)

REVISION HISTORY

- Refer to MediaLab

APPENDICES

- Appendix A: Critical Values Chart

Critical Value Chart

APPENDIX A: Critical Values Chart

Department	Test	Critical – call within 30 minutes		
Blood Bank	Compatibility	Any compatibility problems.		
	Transfusion Reactions	Any transfusion reactions indicating incompatibility.		
Chemistry	Acetaminophen	All Ages: $\geq 150.0 \mu\text{g/mL}$		
	Direct Bilirubin	0-18 yrs	$\geq 1.0 \text{ mg/dL}$	
		18 yrs to unspecified	$\geq 15.0 \text{ mg/dL}$	
	Calcium	0 to unspecified:	$< 6.5 \text{ mg/dL}$	
		0-1 month	$> 12.0 \text{ mg/dL}$	
		1 month to unspecified	$> 11.5 \text{ mg/dL}$	
	Carbon Dioxide	$< 10 \text{ mmol/L}$		
	Creatinine	0-18 yrs	$\geq 2.0 \text{ mg/dL}$	
		18 yrs to unspecified	$\geq 15.0 \text{ mg/dL}$	
	Creatinine: Delta Critical Value	0-18yrs	$\geq 0.3 \text{ mg/dL}$ higher than previous	
		>18yrs to unspecified	$> 5.0 \text{ mg/dL}$ with no previous value OR 3X higher than the previous OR $> 4.0 \text{ mg/dL}$ and $> 2.5 \text{ mg/dL}$ higher than previous value	
	Digoxin	$> 2.0 \text{ ng/mL}$		
	Glucose (Serum/Plasma)	0 up to 7 days	< 40 or $> 180 \text{ mg/dL}$	
		7 days up to 18 yrs	< 50 or $> 300 \text{ mg/dl}$	
		18 yrs up to unspecified	< 55 or $> 500 \text{ mg/dL}$	
	Glucose *Gestational Tolerance test	0 up to 18 yrs	< 50 or $> 300 \text{ mg/dl}$	
		18 yrs to unspecified	< 55 or $> 500 \text{ mg/dL}$	
	Lithium	$> 1.5 \text{ mmol/L}$		
	Magnesium	≤ 1.0 and $> 4.8 \text{ mg/dL}$		
	Potassium	6 months to 1 yr	< 3.0 or $> 6.1 \text{ mmol/L}$	
		1 yr to unspecified	< 3.0 or $> 6.0 \text{ mmol/L}$	
	Salicylate	$> 30 \text{ mg/dL}$		
Sodium	< 125 or $> 155 \text{ mmol/L}$			
Troponin	$> 60 \text{ ng/mL}$ <i>*1st time in a Cardiac Series</i>			
Total Bilirubin	$> 15 \text{ mg/dL}$			
Valproic	0-18 yrs	$\geq 125 \mu\text{g/mL}$		
	18 yrs to unspecified	$> 150 \mu\text{g/mL}$		
Vancomycin Peak	$> 50 \mu\text{g/mL}$			
Vancomycin Trough	$> 25 \mu\text{g/mL}$			
RapidPoint	Lactate	$> 2.0 \text{ mmol/L}$		
	pH Blood Gases	All ages: < 7.0 and > 7.6		
	Ionized Calcium Blood Gas	0-6 months	< 0.8 or $> 1.4 \text{ mmol/L}$	
		≥ 6 months	< 0.8 or $> 1.6 \text{ mmol/L}$	
Carboxyhemoglobin (COHb)	$> 15\%$			
Coagulation	INR	≥ 5.0		
	PTT	$> 100 \text{ sec.}$		
	Fibrinogen	$< 90 \text{ mg/dL}$		
	Heparin Level – UFH	$> 1.0 \text{ IU/mL}$		
	Heparin Level – LMWH	$> 2.0 \text{ IU/mL}$		