



A Subsidiary of Laboratory Sciences of Arizona

Sonora Quest Laboratories Critical Value Policy Effective September 1, 2007

A critical value policy for imminently life threatening results is mandated by federal regulation (CFR493.1109f) and the College of American Pathologists.

Certain test results have been identified as being potentially life threatening when the values fall outside established ranges. These tests are flagged as "Critical Values" and must be handled in a different manner than other abnormal or STAT test results.

Sonora Quest Laboratories is responsible for effectively communicating and documenting the Critical Value test results to the original ordering physician, nurse, hospital-designated personnel, clinic, or client. Appropriate documentation includes the first and last name of the person receiving the critical value test results. This communication is required 24 hours per day/7 days per week.

The attached critical values list represents those analytes and values identified as potentially life threatening. Certain disciplines are not included in this listing. Cytopathology, surgical pathology, cytogenetics, microbiology, virology, and serology call results that may have significant impact on patient care. No other abnormal test results will be called unless otherwise requested by the ordering physician on the test requisition.

Exception Process to the Critical Value Policy:

Clients may request, in writing on the client's letterhead, alterations to the implementation of the critical policy as indicated below. No alterations will change the critical policy itself.

- Sonora Quest Laboratories allows reasonable exceptions to our Critical Value Policy based on the provider(s) rendering patient care documenting their requests annually in writing.
- The request must be submitted in writing on client's letterhead.
- All requests will be reviewed by the Sonora Quest Laboratories Medical Director and a formal exception confirmation letter will be generated.
- **The exception confirmation letter must be signed by all physicians using the account.** No single person (i.e. Medical Director, Company President, etc.) may sign the letter on behalf of all physicians. New physicians must sign a copy of the original letter and be added to the file.
- The request and exception confirmation letter will be kept in the client's master file on the Sonora Quest Laboratories' premises.
- **All requests/letters must be renewed annually.**
- The requestor must acknowledge that occasionally, due to operational factors (computer down, etc.) that Sonora Quest Laboratories may be unaware of exceptions to this policy and will default to their normal procedure.

Critical Value Table - Toxicology

	Critical High	Units
Acetaminophen	>49	μg/mL
Acetone	>19	mg/dL
Alcohol, Ethyl, Blood	>299	mg/dL
Amikacin, Trough	>10.0	μg/mL
Carbamazepine	>15.0	μg/mL
Cholinesterase, Plasma (<12 months)	<701	U/L
Cholinesterase, Plasma (12 months & above)	<1201	U/L
Cholinesterase, RBC (<12 months)	<501	U/L
Cholinesterase, RBC (12 months & above)	<901	U/L
Cyclosporine	>500	ng/mL
Digoxin	>2.4	ng/mL
Digoxin, Free	>2.2	ng/mL
* Dilantin® (Phenytoin)	>30.0	μg/mL
Ethanol	>299	mg/dL
Ethylene Glycol	>10	mg/dL
Gentamicin, Trough	>2.0	μg/mL
Isopropanol	>24	mg/dL
Lidocaine	>8.0	μg/mL
Lithium	>1.5	mmol/L
Methanol	>19	mg/dL
N-Acetyl Procainamide (NAPA)	>31.9	μg/mL
Pentobarbital	>10.0	μg/mL
Phenobarbital	>59.9	μg/mL
* Phenytoin (Dilantin®)	>30.0	μg/mL
* Phenytoin, Free (Dilantin®, Free)	>3.0	μg/mL
Primidone	>24.9	μg/mL
Procainamide	>11.9	μg/mL
Procainamide + NAPA	>31.9	μg/mL
Prograf (Tacrolimus)	>25.0	ng/mL
Quinidine	>9.9	μg/mL
Salicylates	>39.9	mg/dL
Tacrolimus (FK506)	>25.0	ng/mL
Theophylline (<3 months)	>15.0	μg/mL
Theophylline	>25.0	μg/mL
Tobramycin, Trough	>2.0	μg/mL
Valproic Acid	>149	μg/mL
Vancomycin, Peak	>60.0	μg/mL
Vancomycin, Trough	>30.0	μg/mL

* Indicates changes or additions from prior printing

Critical Value Table - Hematology

	Critical Low	Critical High	Units
Hematocrit	<18.0		%
Hemoglobin	<6.1		g/dL
Platelet Count	<31	>1000	Thous/cu.mm
WBC	<1.0	>49.9	Thous/cu.mm
Neutrophils, Absolute	<0.5		Thous/cu.mm

Critical Value Table – Coagulation

	Critical Low	Critical High	Units
aPTT		>100	Seconds
Factor II	<10		%
Factor V	<10		%
Factor VII	<10		%
Factor VIII	<10		%
Factor IX	<10		%
Factor X	<10		%
Factor XI	<10		%
Factor XII	<10		%
Factor VIII & IX Inhibitor		≥0.1	BU
Fibrinogen	<50		mg/dL
Heparin Assay (unfract.) by Anti-Xa		>0.7	U/mL
LMW Heparin by Anti-Xa		>1.0	U/mL
Protime INR		>5.9	

Critical Value Table - Chemistry

	Critical Low	Critical High	Units
T.Bilirubin, (<1 month)		>18.0	mg/dL
Calcium, Serum	<6.6	>12.9	mg/dL
Calcium, Ionized	<3.3	>6.0	mg/dL
CO ₂	<11	>40	mmol/L
Glucose, Serum (<1 month)	<40	>300	mg/dL
Glucose, Serum	<50	>500	mg/dL
Glucose, CSF	<30		mg/dL
Magnesium, Ionized	<0.55		mg/dL
Magnesium, Serum	<1.0	>4.9	mg/dL
Phosphorus, Serum	<1.1	>9.0	mg/dL
Potassium, Serum (<1 month)	<2.8	>7.0	mmol/L
Potassium, Serum	<2.8	>6.0	mmol/L
Sodium, Serum	<121	>159	mmol/L

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