

LSA HOSPITAL CRITICAL VALUE LIST

LABORATORY SCIENCES OF ARIZONA* SONORA QUEST LABORATORIES

*If no specific age is specified, value refers to all age ranges.

TEST	UNIT	SEX	AGE RANGE	LOW LIMIT	HIGH LIMIT	COMMENTS
HEMATOLOGY						
Hemoglobin	g/dL	M/F	*	<6.1	none	
Hematocrit	%	M/F	*	<18.1	none	
Microscopic Examination		M/F	*	Presence of bacteria, fungus or parasite.		
Platelet Count	K/mm ³	M/F	*	<31	>1000	
ANC (Absolute Neutrophil Count) – Arizona Only - Peritoneal Fluid	/mm ³	M/F	*	none	>250	Peritoneal Fluid
COAGULATION						
aPTT	sec	M/F	*	none	>100.0	
Fibrinogen – BBMC, BBWMC, BCGMC, BDMC, BDWMC, BEMC, BGMC, BGFMC, BIMC, BLMC, BPMC, BTMC, BUMCP, BUMCS, BUCMT, EMCH, PCMH, Page	mg/dL	M/F	*	<51	None	
Fibrinogen – BCCH, BFCMC, MMC, NCMC, OCH, SRMC, TCH, WMC	mg/dL	M/F	*	<100	None	
Heparin Assay (unfrac) by Anti-Xa	U/mL	M/F	*	none	> 1.2	
LMW Heparin by Anti-Xa	U/mL	M/F	*	none	> 1.5	
Protime (PT) INR		M/F	*	none	> 5.0	

TEST	UNIT	SEX	AGE RANGE	LOW LIMIT	HIGH LIMIT	COMMENTS
CHEMISTRY						
Ammonia	μmol/L	M/F	0 - 1 M	none	>150	
Bilirubin, Total (Neonatal)	mg/dL	M/F	0 - 31 D	none	>15.0	
Calcium	mg/dL	M/F	*	<6.6	>12.9	
Calcium, Ionized	mg/dL	M/F	*	<3.3	>6.0	
Carboxyhemoglobin, blood	%	M/F	*	None	>20.0	
CO2	mmol/L	M/F	*	<11	>40	
Glucose	mg/dL	M/F	0 - 31 D	<40	>300	
Glucose	mg/dL	M/F	31 D - 150 Y	<50	>500	
Glucose, CSF	mg/dL	M/F	*	<30	None	
Magnesium	mg/dL	M/F	*	<1.0	> 4.9	
Magnesium, OB	mg/dL	M/F	*	<1.0	> 9.5	
Phosphorus	mg/dL	M/F	*	<1.1	None	
Potassium	mmol/L	M/F	0 - 31 D	<3.0	>7.0	
	mmol/L	M/F	31 D - 150 Y	<3.0	>6.0	
Potassium for Roche Users Only	mmol/L	M/F	0 – 31 D	<3.0	>7.0	
	mmol/L	M/F	31 D – 7 M	<3.0	>6.0	
	mmol/L	M/F	7 M – 1Y	<3.0	>6.1	
	mmol/L	M/F	1Y - 150 Y	<3.0	>6.0	
Sodium	mmol/L	M/F	0 – 64 yrs.	< 121	> 159	
	mmol/L	M/F	64 - 150 yrs.	< 126	> 154	

TEST	UNIT	SEX	AGE RANGE	LOW LIMIT	HIGH LIMIT	COMMENTS
TOXICOLOGY						
Acetaminophen	µg/mL	M/F	*	n/a	>150	
Acetone	mg/dL	M/F	*	n/a	>19	
Alcohol, Ethyl Blood	mg/dL	M/F	*	n/a	>299	
Amikacin, Peak	µg/mL	M/F	*	n/a	>35	
Amikacin, Trough	µg/mL	M/F	*	n/a	>10	
Amikacin, Random	µg/mL	M/F	*	n/a	>35	
Carbamazepine	µg/mL	M/F	*	n/a	>15.0	
Cyclosporin (BMT)	ng/mL	M/F	*	n/a	>400	
Digoxin	ng/mL	M/F	*	n/a	>2.4	
Digoxin, Free	ng/mL	M/F	*	n/a	>2.2	
Dilantin (Phenytoin)	µg/mL	M/F	*	n/a	>30.0	
Ethanol, quantitative	mg/dL	M/F	*	n/a	>299	
Ethylene Glycol	mg/dL	M/F	*	n/a	>10	
Gentamicin, Peak	µg/mL	M/F	*	n/a	>12.0	
Gentamicin, Trough	µg/mL	M/F	*	n/a	>2.0	
Gentamicin, Random	µg/mL	M/F	*	n/a	>12.0	
Isopropanol	mg/dL	M/F	*	n/a	>24	
Lithium	mmol/L	M/F	*	n/a	>1.5	
Methanol	mg/dL	M/F	*	n/a	>19	
Pentobarbital	µg/mL	M/F	*	n/a	>10.0	
Phenobarbital	µg/mL	M/F	*	n/a	>59.9	
Phenytoin (Dilantin)	µg/mL	M/F	*	n/a	>30.0	
Phenytoin, Free (Dilantin, Free)	µg/mL	M/F	*	n/a	>3.0	
Propylene Glycol	mg/dL	M/F	*	n/a	>99	
Salicylates	mg/dL	M/F	*	n/a	>39.9	
Tacrolimus	ng/mL	M/F	*	n/a	>20.0	

TEST	UNIT	SEX	AGE RANGE	LOW LIMIT	HIGH LIMIT	COMMENTS
Theophylline	µg/mL	M/F	0 - 3M	n/a	>15.0	
	µg/mL	M/F	3M - 150 Y	n/a	>20.0	
Tobramycin, Peak	µg/mL	M/F	*	n/a	>12.0	
Tobramycin, Trough	µg/mL	M/F	*	n/a	>2.0	
Tobramycin, Random	µg/mL	M/F	*	n/a	>12.0	
Valproic Acid	µg/mL	M/F	*	n/a	>149	
Vancomycin, Peak	µg/mL	M/F	*	n/a	>60.0	
Vancomycin, Trough	µg/mL	M/F	*	n/a	>30.0	
Vancomycin, Random	µg/mL	M/F	*	n/a	>60.0	

TEST	UNIT	SEX	AGE RANGE	COMMENTS
MICROBIOLOGY				
Blood Culture Initial Gram Stain	N/A	M/F	*	Positive
Spinal Fluid Direct or Culture	N/A	M/F	*	Positive
Culture (ANY SOURCE)	N/A	M/F	*	Positive- <i>Clostridium perfringens</i>
Wound Direct Gram Stain	N/A	M/F	*	Positive – GPR typical of <i>Clostridium</i> species
Direct Gram Stains or Any source suspect for Bioterrorism	N/A	M/F	*	GPR Positive suspect for Anthrax
ED/Inpatient/Outpatient: Wounds/ Blood/ CSF/ Other normally sterile sites	N/A	M/F	*	Positive for Group A Strep
Outpatient: Gram Stain (direct specimen or culture isolate) from sterile site	N/A	M/F	*	Positive for GNDC
Culture	N/A	M/F	*	Positive for: <i>VRSA (Vancomycin-resistant Staphylococcus aureus)</i>

				<u>VISA (Vancomycin intermediate Staphylococcus aureus)</u> <u>Bacillus anthracis</u> <u>Yersinia pestis</u> <u>Francisella tularensis</u> <u>Brucella spp.</u> <u>Clostridium botulinum</u> <u>Any organism on the Bioterrorism Listing</u>
Neonates – Virus Culture Any Source	N/A	M/F	< 6 weeks	Positive for: Enterovirus Cytomegalovirus (CMV) Herpes simplex Virus (HSV) Varicella Zoster Virus (VZV)
Telephoned reports may also be generated, based on non-critical parameters, such as patient demographics, specimen type, organism, and special circumstances.				

LSA Courtesy Notification for Highly Elevated or Decreased Results

If the patient's result is...	And...	Then ...
1. ALT (L&D only) - NCMC, MMC, BFCMC		
>100	Patient is a Labor and Delivery patient.	1. Call Caregiver to report value. 2. Document the call by adding a Result Comment in CentraLink or Cerner. 3. Type in Results called to <i>(Cerner ID or first and last name)</i> at <i>(time/date and Tech Cerner ID)</i> .
2. AST (L&D only) - NCMC, MMC, BFCMC		
>100	Patient is a Labor and Delivery patient.	1. Call Caregiver to report value. 2. Document the call by adding a Result Comment in CentraLink or Cerner. 3. Type in Results called to <i>(Cerner ID or first and last name)</i> at <i>(time/date and Tech Cerner ID)</i> .
3. Bilirubin, Total (L&D only) - NCMC, MMC, BFCMC		
>3.0	Patient is a Labor and	1. Call Caregiver to report value. 2. Document the call by adding a Result Comment in CentraLink or Cerner.

	Delivery patient.	3. Type in Results called to (<i>Cerner ID or first and last name</i>) at (<i>time/date and Tech Cerner ID</i>).
4. Fetal Fibronectin		
Positive		1. Call Caregiver to report value. 2. Document the call by adding a Result Comment in Cerner using code RCT. Results called to (<i>Cerner ID or first and last name</i>) at (<i>time/date</i>).
5. Lactic Acid		
≥ 4.0	First positive for current patient encounter.	1. Call Caregiver to report value. 2. Document the call adding a Result Comment in Cerner using the coded comment FLA. The first positive LA was reported to (<i>Cerner ID or first and last name</i>) by <i>Tech Cerner ID</i>)
≥4.0 for current patient encounter	Previous positive result was called to Caregiver.	1. Release results.
6. Troponin T (Roche Contemporary)		
≥ 0.10	First positive result for current patient encounter.	1. Call Caregiver to report value. 2. Document the call adding a Result Comment in Cerner using the coded comment FTROP. The first positive Troponin was reported to (<i>Cerner ID or first and last name</i>) by <i>Tech Cerner ID</i>)
≥ 0.10 for current patient encounter	Previous positive result was called to caregiver	1. Release results.
7. Troponin T, High Sensitive (Roche)		
≥100	First positive for current patient encounter.	1. Call Caregiver to report value. 2. Document the call adding a Result Comment in Cerner using the coded comment FTROP. The first positive Troponin was reported to (<i>Cerner ID or first and last name</i>) by <i>Tech Cerner ID</i>).
≥100	Previous positive result was called to Caregiver.	1. Release results.
8. Troponin I (Ortho, Siemens)		
≥0.5	First positive for current patient encounter.	1. Call Caregiver to report value. 2. Document the call adding a Result Comment in Cerner using the coded comment FTROPI. The first positive Troponin I was reported to (<i>Cerner ID or first and last name</i>) by <i>Tech Cerner ID</i>).

≥0.5	Previous positive result was called to Caregiver.	1. Release results.
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