

	Policy/Procedure Title:		Critical Values Chart	
	<input checked="" type="checkbox"/> WEH	<input checked="" type="checkbox"/> WGH	Policy/Procedure #	ADMC.1100.3.0
	<input checked="" type="checkbox"/> WGSB	<input checked="" type="checkbox"/> WSRH	Manual:	Administration
	<input checked="" type="checkbox"/> WYH		SubManual:	Specimen/Patient

Appendix A: Critical Laboratory Values

Section	Analyte	Critical Low	Critical High	Units
Blood Gas	O2Hb	<85		%
Blood Gas	%COHb (Carboxyhemoglobin)		>15	%
Blood Gas	O2 Saturation	<85		%
Blood Gas	pCO2	<20	>60	mm Hg
Blood Gas	pH (arterial)	<7.25	>7.55	pH
Blood Gas	pO2	<55		mm Hg
Blood Gas	pH (venous)	<7.22	>7.52	Units
Chemistry	Calcium	<6.5	>12.5	mg/dL
Chemistry	Calcium, ionized	<0.78	>1.58	mmol/L
Chemistry	CO2	<10	>45	mmol/L
Chemistry	Glucose	<50	>500	mg/dL
Chemistry	Glucose, whole blood	<50	>500	mg/dL
Chemistry	Lactic Acid		>4.0	mmol/L
Chemistry	Magnesium	<1	>5	mg/dL
Chemistry	Phosphorus	<1.0		mg/dL
Chemistry	Potassium	<2.8	>6.2	mmol/L
Chemistry	Potassium, whole blood	<2.8	>6.2	mmol/L
Chemistry	Sodium	<120	>160	mmol/L
Coagulation	PT (INR)		≥5.0	
Coagulation	PTT (ECH, GH, WSRH, YH)		>130	seconds
	PTT (GSH)		>136	
Hematology	Blasts		Present	
Hematology	Platelet Count	<20	>1000	K/mcL
Hematology	ABS neut. Ct	<0.5		K/mcL
Hematology	Blood Parasite		Present	
Hematology	Hematocrit	<21	>69	%
Hematology	Hemoglobin	<7	>19.9	
Hematology	WBC	<1.0	>50	K/mcL
Microbiology	AFB Culture		Positive	n/a
Microbiology	AFB Smear		Positive	n/a
Microbiology	Blood Culture		Positive	n/a
Microbiology	CSF Culture		Positive	n/a
Microbiology	CSF Gram Stain		Positive	n/a
Microbiology	CSF Meningitis Panel		Positive	n/a

Section	Analyte	Critical Low	Critical High	Units
Microbiology	Rapid HIV		Positive	n/a
Microbiology	Sterile BF Culture		Positive	n/a
Microbiology	Sterile BF Gram Stain		Positive	n/a
Microbiology	Transfusion Reaction Culture		Positive	n/a
Microbiology	Transfusion Reaction Stain		Positive	n/a
Drugs	Acetaminophen		>150	mcg/mL
Drugs	Carbamazepine		>15	mcg/mL
Drugs	Digoxin		>2.5	ng/mL
Drugs	Gentamycin Peak		>12	mcg/mL
Drugs	Gentamycin Trough		>2.5	mcg/mL
Drugs	Lithium		>1.5	mmol/L
Drugs	Phenobarbital		>50	mcg/mL
Drugs	Phenytoin (Dilantin)		>30.0	mcg/mL
Drugs	Salicylate		>40	mg/dL
Drugs	Theophylline		>25	mcg/mL
Drugs	Tobramycin Peak		>12	mcg/mL
Drugs	Tobramycin Trough		>2.0	mcg/mL
Drugs	Valproic Acid		>200.0	mcg/mL
Drugs	Vancomycin Trough		>20	mcg/mL

Specific Criteria

Section	Analyte	Critical Low	Critical High	Units	Criteria
Chemistry	Glucose	<40	>200	mg/dL	Nbn-1mo
Chemistry	Glucose, urine		Positive		Nbn-1mo
Hematology	Hematocrit	<24	>69	%	Nbn-1mo
Hematology	Hemoglobin		>21.6		Nbn-1mo
Hematology	Platelet	<100			Nbn-1mo
Microbiology	Group B Strep		Positive		Labor Hall

Special Criteria: Massive Transfusion Protocol Patients

Result	MTP Critical	Units	Action
Platelet	< 50	K/mcL	Platelet transfusion
Fibrinogen	< 120	mg/dL	Cryo transfusion
Ionized Calcium	< 1.00	mmol/L	Calcium dose
pH, Venous	< 7.25	units	Bicarbonate dose

Neonatal Bilirubin – Critical Levels:

Age in Hours	Bili (mg/dL)	Hours	Bili (mg/dL)	Hours	Bili (mg/dL)	Hours	Bili (mg/dL)
0 12	7.0	45 46	12.9	79 80	16.5	113 114	17.6
12 13	7.1	46 47	13.0	80 81	16.6	114 115	17.6
13 14	7.2	47 48	13.2	81 82	16.7	115 116	17.6
14 15	7.2	48 49	13.4	82 83	16.7	116 117	17.6
15 16	7.3	49 50	13.6	83 84	16.8	117 118	17.6
16 17	7.3	50 51	13.7	84 85	16.8	118 119	17.6
17 18	7.3	51 52	13.9	85 86	16.9	119 120	17.6
18 19	7.4	52 53	14.1	86 87	17.0	120 121	17.6
19 20	7.5	53 54	14.2	87 88	17.0	121 122	17.6
20 21	7.6	54 55	14.4	88 89	17.1	122 123	17.6
21 22	7.7	55 56	14.6	89 90	17.1	123 124	17.6
22 23	7.7	56 57	14.8	90 91	17.2	124 125	17.6
23 24	7.8	57 58	14.9	91 92	17.3	125 126	17.5
24 25	8.2	58 59	15.1	92 93	17.3	126 127	17.5
25 26	8.5	59 60	15.2	93 94	17.4	127 128	17.5
26 27	8.7	60 61	15.3	94 95	17.4	128 129	17.5
27 28	9.0	61 62	15.3	95 96	17.4	129 130	17.5
28 29	9.3	62 63	15.4	96 97	17.4	130 131	17.5
29 30	9.5	63 64	15.5	97 98	17.4	131 132	17.4
30 31	9.8	64 65	15.5	98 99	17.4	132 133	17.4
31 32	10.1	65 66	15.6	99 100	17.4	133 134	17.4
32 33	10.4	66 67	15.7	100 101	17.5	134 135	17.4
33 34	10.6	67 68	15.7	101 102	17.5	135 136	17.4
34 35	10.9	68 69	15.8	102 103	17.5	136 137	17.4
35 36	11.1	69 70	15.9	103 104	17.5	137 138	17.4
36 37	11.4	70 71	15.9	104 105	17.5	138 139	17.3
37 38	11.7	71 72	16.0	105 106	17.5	139 140	17.3
38 39	12.0	72 73	16.1	106 107	17.5	140 141	17.3
39 40	12.2	73 74	16.1	107 108	17.5	141 142	17.3
40 41	12.3	74 75	16.2	108 109	17.6	142 143	17.3
41 42	12.4	75 76	16.3	109 110	17.6	143 144	17.3
42 43	12.5	76 77	16.3	110 111	17.6	144 145	17.4
43 44	12.5	77 78	16.4	111 112	17.6	145 146	17.4
44 45	12.7	78 79	16.4	112 113	17.6		

PROCEDURE HISTORY

REVISION #	DATE/INITIALS	REVISION DESCRIPTION
1	4/4/18 ALP	Initial Chart.
2	3/11/19 ALP	Changed Ptt from > 150 to >130. Added GSH PTT >136. Removed CSF Crypto AG. Added CSF Meningitis panel.
3	4/15/19 ALP	Changed glucose critical value from < 40 to <50. Approved by all MEC's on 4/8/19.

Approved by System Lab Integration and all Medical Directors 3/11/19.