

## Downtime Laboratory Reference and Critical Ranges

Blood Gas			
ABG		Reference	Critical
	pH	7.35 - 7.45	< 7.20 , > 7.60
	pCO2	35 - 45 mmHg	< 19 , > 71
	pO2	80 - 100 mmHg	<60
	O2 Sat	94.0 - 98.0 %	
	B.E.	-2.0 - 2.0 mmol/L	
HCO3-	19 - 31 mmol/L	< 10 , > 40	
	Ca++	1.16 - 1.32 mmol/L	< 0.81 , > 1.57
	CO	<4 %	>15
VBG		Reference	Critical
	pH	7.32 - 7.43	
	pCO2	41 - 51 mmHg	
	pO2	35 - 45 mmHg	
	O2 Sat	70 - 80 %	
	B.E.	0.0 - 4.0 mmol/L	
HCO3-	24 - 28 mmol/L		

Hematology			
CBCD		Reference	Critical
	WBC	3.5 - 10.8 10 <sup>3</sup> /uL	
	RBC	4.00 - 5.40 10 <sup>6</sup> /uL	
	Hgb	12.0 - 16.0 g/dL	< 6.5
	Hct	35 - 47 %	
	MCV	80 - 97 fL	
	MCH	27 - 31 pg	
	MCHC	31 - 36 g/dL	
	RDW	10.5 - 15.0 %	
	PLT	150 - 450 10 <sup>3</sup> /uL	< 20 (CHOA <10)
	MPV	7.4 - 10.4 fL	
	ABS Neut	1.5 - 7.7 10 <sup>3</sup> /uL	< 1.0 (CHOA none)
	ABS Lymph	1.0 - 4.8 10 <sup>3</sup> /uL	
	ABS Mono	0.0 - 0.8 10 <sup>3</sup> /uL	
	Abs Eo	0.0 - 0.6 10 <sup>3</sup> /uL	
	Abs Baso	0.0 - 0.2 10 <sup>3</sup> /uL	

Coagulation			
		Reference	Critical
	INR	0.77 - 1.02	> 5.00
	aPTT	26.0 - 36.3 sec	> 100.0
	Fibrinogen	110.8 - 404.3 mg/dL	< 75.0
D-Dimer	< 200		

CSF			
		Reference	Critical
	CSF WBC		> 20 /uL
	CSF Glucose	40 - 70 mg/dL	< 30
CSF Protein	15 - 45 mg/dL		

Chemistry			
CMP & BMP		Reference	Critical
	Na	135 - 145 mmol/L	< 120 , > 155
	K	3.5 - 5.0 mmol/L	< 2.8 , > 6.0
	Cl	101 - 111 mmol/L	
	CO2	22 - 32 mmol/L	< 15 , > 40
	Glucose	70 - 100 mg/dL	0-14 day old <40 >300 >14 day old <50 >500
	BUN	6 - 24 mg/dL	
	Creatinine	0.51 - 0.95 mg/dL	
	BUN/CRE ratio	8 - 20	
	Calcium	8.6 - 10.3 mg/dL	< 6.5 , > 13.0
	Total Protein	6.4 - 8.9 g/dL	
	Albumin	3.2 - 5.2 g/dL	
	Globulin	2 - 4 g/dL	
	A/G ratio	1 - 3	
	Bilirubin, Cord	0.5 - 2.0 mg/dL	> 2
	Bilirubin, Total	0.2 - 1.0 mg/dL	>14 day old >11.9
		10.0 - 14.9 mg/dL	4-14 day old >14.9
		<12.0 mg/dL	2-3 day old >17.9
		<10.0 mg/dL	0-1 day old >14.9
	ALP	34 - 104 U/L	
ALT	7 - 52 U/L		
AST	13 - 39 U/L		
eGFR non-A.A	> 60		
eGFR A.A	> 60		

Ammonia	16 - 53 umol/L	
Amylase	29 - 103 U/L	
bHCG	< 5.0	
Lactic Acid	0.5 - 2.0 mmol/L	> 2.0
Lipase	11 - 82 U/L	
Magnesium	1.9 - 2.7 mg/dl	< 1.0 , > 4.5
Phosphorus	2.5-5.0 mg/dL	<1
Troponin - I	< 0.03 ng/dL	≥ 0.03
24hr U Protein (Obstetric patients ONLY)	0 - 165 mg/24Hr	≥ 300 mg/24 hours
RU Microalb/Creat (Obstetric patients ONLY)		>22.7

Acetaminophen	< 50 ug/dL	> 50
Alcohol	< 10 mg/dL	> 400
Carbamazepine	4.0-12.0	>15
Digoxin	0.8 - 2.0 ng/mL	> 2.5
Gentamicin		>12
Lithium	0.6 - 1.2 mmol/L	> 1.6
Phenobarbital	17 - 34 mcg/mL	>50
Phenytoin	10 - 20 mcg/mL	>30
Salicylate	< 30 mg/dL	> 30
Theophylline	10 - 20 mcg/mL	>25
Valproic Acid	50 - 100	>150
Vancomycin Trough		>30