

APPENDIX A: CRITICAL VALUES CHART

Testing Area	Alerting Category	Test	Red Category: Complete Alert within 1 Hour	Orange Category: Complete Alert within 8 hrs. May be acceptable to defer between 9pm & 8am.
Blood Bank	Always Red	Compatibility	Any compatibility problems.	
		Transfusion Reactions	Any transfusion reactions indicating incompatibility.	
Chemistry	Always Red Always potentially life-threatening, even if patient is actively being treated	Alcohol	Above: 200 mg/dl	
		Bilirubin on Infant 0-30 days	Above: 15 mg/dl	
		Carbon Dioxide	Below: 10 mEq/L	
		Creatinine	>4.0 mg/dl with no previous critical or >4.0 mg/dl and >2.5 mg/dl higher than previous critical value	
		Digoxin	Above: 2.0 ng/ml	
		Glucose, CSF	Below: 30 mg/dl	
		Glucose	Below: 50 mg/dl Above: 500 mg/dl	
		Lithium	Above: 1.5 mEq/L	
		Ph (arterial) Blood Gases	Below 7.0 Above: 7.6	
		Potassium	Below: 2.8 mEq/L Above: 6.0 mEq/L	
		Sodium	Below: 120 mEq/L Above: 160.0 mEq/L	"Orange" if repeated within 24 hrs. and improving
	1 st Time in a Cardiac Series	Troponin	Above: 0.1 ng/mL	
	Red on First Instance, ¹ Orange Thereafter. Most dangerous when first detected, but providers should have these results as condition is being treated.	Acetaminophen	Above: 100 µg/ml	
		Calcium	Below: 7.0 mg/dl Above: 13.0 mg/dl	
		Magnesium	Below: 0.8 mg/dl Above: 5.0 mg/dl	
Salicylate		Above: 30 mg/ml		
Valproic		Above: 150 µg/ml		
	Vancomycin	PEAK: > 50 µg/ml TROUGH: > 25 µg/ml		
Coagulation	Always Red	INR	Above: 4.0	
		PTT	Above: 90 sec.	
		Fibrinogen	Below 90 mg/dL Above 450 mg/dL	

¹ First instance = No critical value in the same result range (high versus low) in the past 5 days

Testing Area	Alerting Category	Test	Red Category: Complete Alert within 1 Hour	Orange Category: Complete Alert within 8 hrs. May be acceptable to defer between 9pm & 8am.
Hematology	Always Red	Hemoglobin	Below: 8 mg/dl	Above: 18 g/dl
		Hematocrit	Below: 24 %	Above: 60 %
		Leukocytes	Below: 1,000 / μ L	
		Abs. Neutrophil	Below: <500 / μ l	
	Red on first instance,* orange thereafter.	Leukocytes	Above: 50,000 / μ L	
		Platelets	Below: 20,000 / μ L or 50% decrease in count <50,000 / μ L	
		Blast cells	Above: 1,000,000 / μ L 1st time or >20%	
Microbiology	Always Red	Blood cultures	Growth of any organism(s)	
		Gram stain	Positive gram stains from: CSF & Joint Fluid	
		CSF Cultures	Growth of any organism(s)	
		Culture	Growth of Group A streptococcus (from other than throat)	Growth of Enteric Pathogen
			Growth of Group B streptococcus from newborns	Positive culture for N. gonorrhea Growth of VRE or MRSA
		Positive Rapid Testing	RSV Influenza A or B C. diff on IP and ED MRSA Legionella S. Pneumonia	
Reference Laboratory Reporting	Always Red	Any Test Deemed Critical by Reference Lab	Any Critical Value called from a Reference Lab	
	Orange 1 st Time* so providers can initiate treatment within the next few hours. Routine Thereafter.			Positive HIV WB (new diagnosis) Positive B. pertussis by PCR Positive Acid Fast Stain/ Isolate Positive Parasites in Blood or Feces Positive Chlamydia or GC DNA Probes Any Significant Findings ² called from a Reference Lab.

*First instance = No critical value in the same result range (high versus low) in the past 5 days

²Significant microbiology findings are defined as “infectious disease related results that are needed promptly to avoid potentially serious health consequences for the patient” or, in the case of contagious diseases, “potentially serious health consequences to others exposed to the patient if not acknowledged and/or treated by the physician.”