

NorDx SMHC campuses  
Critical Values

**CHEMISTRY**

Test Name	Critical Value		Comments / Frequency (if not each time)
Acetaminophen		High: > 250 ug/ml	
Bilirubin, Total (≤ 6 months)		High: > 15.0 mg/dL	
Calcium, total	Low: < 6.0 mg/dL	High: > 13.0 mg/dL	> 15 Absurd Value < 5 Absurd Value
Digoxin		High: > 2.5 ng/mL	>10 Absurd Value
Ethanol		High: > 400 mg/dL	
Gentamicin (Peak)		High: > 20.0 ug/mL	
Gentamicin (Trough or Random)		High: > 2.0 ug/ml	
Glucose Serum > 6 months	Low: < 45 mg/dL	High: > 500 mg/dL	> 1200 Absurd Value
Glucose Serum ≤ 6 months	Low: < 45mg/dL	High: > 200 mg/dL	> 400 Absurd Value
Lactate/Blood		High: > 4.0 mmol/L	Initial Detection for Inpatients; Call all for Outpatients
Lithium (≤ 65 years)		High: ≥ 1.5 mEq/L	> 8.0 Absurd Value
Lithium (> 65 years)		High: ≥ 1.3 mEq/L	
Magnesium	Low: < 1.0 mg/dL	High: > 8.1 mg/dL	
Phenobarbital		High: > 60.0 ug/mL	> 120 Absurd Value
Phenytoin (Dilantin)		High: > 35.0 ug/mL	> 80 Absurd Value
Phosphate	Low: ≤ 1.0 mg/dL	High: > 9.0 mg/dL	
Potassium	Low: ≤ 2.7 mEq/L	High: > 6.3 mEq/L	> 10 Absurd Value
Salicylate		High: > 400 mg/L	
Sodium	Low: < 120 mEq/L	High: > 160 mEq/L	< 110 Absurd Value > 175 Absurd Value
Theophylline		High: > 20.0 ug/mL	> 80 Absurd Value
Tobramycin (Peak)		High: > 25.0 ug/mL	
Tobramycin (CF)		High: > 30.0 ug/mL	
Tobramycin (Trough or Random)		High: > 2.0 ug/mL	
High Sensitivity Troponin T		High: > 50 ng/L	
Troponin I (backup method)		High: ≥ 0.05	
Valproic acid (Depakote)		High: > 150.0 ug/mL	> 300 Absurd Value
Vancomycin (Random)		High: > 50.0 ug/mL	
Vancomycin (Trough)		High: > 30.0 ug/mL	

**BLOOD GASES**

Test Name	Critical Value		Comments / Frequency (if not each time)
COHb		High: ≥15.0%	
pCO2 (Arterial)	Low: ≤20 mmHg	High: ≥70 mmHg	
pH (Arterial)	Low: ≤7.20	High: ≥7.60	
pH (Venous)	Low: ≤7.20	High: ≥7.50	
pH Cord (Venous)	Low: ≤6.99		
pO2 (Arterial)	Low: <50 mmHg		
tHb	Low: ≤6.5 g/dL		
MetHb		High: >5.0 %	

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**BLOOD BANK**

Test Name	Critical Value	Comments / Frequency (if not each time)
Antibody screen/crossmatch	Positive antibody screen if pregnant (and not due to RhoGam) or incompatible crossmatch following emergency release of blood or urgent request for crossmatched blood. Incompatible blood transfusion.	
Direct anti-globulin test (in neonate)	Positive	
Hemolysis following transfusion	Hemolytic transfusion reaction	

**HEMATOLOGY/COAGULATION/SEROLOGY**

Test Name	Critical Value		Comments / Frequency (if not each time)
Smear Review, Blood or CSF	>5% Blasts, Peripheral	>0% Blasts, CSF	Initial Detection for Inpatients; Call all for Outpatients
CBC, Diff, Smear Review	RBC and WBC parasites		Initial Detection for Inpatients; Call all for Outpatients
White blood cell count	Low: $\leq 1.9$ K/uL	High: $\geq 50.1$ (all ages)	Initial Detection for Inpatients; Call all for Outpatients except known CLL/CML patients with critical WBC in last year.
Hemoglobin/Hematocrit	Low: $\leq 6.5/19.0$		
Platelet Count	Low: $\leq 39,000$	High: $\geq 1,000,000$	Initial Detection for Inpatients; Call all for Outpatients
Schistocytes		3+	
Fibrinogen	Low: $< 100$ mg/dL	N/A	
INR		High: $\geq 5.0$	
Partial thromboplastin time		High: $\geq 60$ secs (outpatients) High: $\geq 150$ secs (inpatients)	

**MICROBIOLOGY**

Test Name	Critical Value	Comments / Frequency (if not each time)
Gram stain - Blood, CSF, sterile body fluid	Positive	
C. difficile antigen and/or Toxin A	Positive	Courtesy Call