

## CRITICAL VALUES

Standardized critical lab values have been determined alongside nursing and providers throughout CHI Health. The critical list is based on the definition of critical meaning- immediate action is needed to care for the patient.

Critical Results will be called on every occurrence for the shaded tests below. For non-shaded tests, critical results will be called on each first or new occurrence of a critical value during each admission.

### CHEMISTRY

Test	Low	High	Units
Acetaminophen		≥100	mcg/ml
Neonatal base excess, Cord Blood		≥16	mmol/L
Bilirubin Neonatal (0-7 days)		≥15	mg/dL
Calcium	≤6.0	≥13.0	mg/dl
Ionized Calcium	≤0.8	≥1.6	mmol/L
Carboxy hemoglobin		≥20	%
Chloride	≤75	≥125	mmol/L
CO <sub>2</sub>	≤10	≥45	mmol/L
Digoxin		≥3.0	ng/mL
Glucose	≤40	≥450	mg/dL
Glucose, newborn, 0-5 days	≤40	≥150	mg/dL
Lactic Acid		≥4.0	mmol/L
Lithium		≥2.0	mmol/L
Magnesium	≤1.0		mg/dL
Magnesium, OB Therapeutic	≤4.7	≥8.5	mg/dL
pCO <sub>2</sub> (blood gas)	≤20	≥70	mmHg
pH (blood gas)	≤7.20	≥7.60	
pH (cord blood, arterial)	≤7.10		
pO <sub>2</sub> (arterial)	≤40		mmHg
Phosphorous	≤1.0		mg/dL
Potassium	≤2.5	≥6.0	mmol/L
Salicylate		≥40.0	mg/dl
Sodium	≤120	≥160	mmol/L
Theophylline		≥25.0	µg/mL
hsTroponin-I (female)		≥ 52.0	ng/L
hsTroponin-I (male)		≥ 77.0	ng/L

## HEMATOLOGY

Test	Low	High	Units
WBC count	≤ 0.5	≥ 50	k/ul
Hemoglobin	≤6.0	≥22.5	g/dl
Hemoglobin, newborn (0-2 days)	≤12.0	≥23.2	g/dl
Platelet count	≤ 20	≥ 1000	k/ul
Absolute Neutrophil Count	≤ 0.5		10 <sup>3</sup> /μl

## COAGULATION

Test	Low	High	Units
INR		≥ 5.0	Ratio
aPTT		≥100	Seconds
Fibrinogen	≤ 75.0		mg/dL
Heparin Xa		≥0.99	IU/mL

## MICROBIOLOGY

Test	
Positive gram/fungal stain	CSF, Blood, Normally sterile fluid
Positive Culture	CSF
Positive Shiga Toxin, EIA	All Positives
Positive Microbiology Panel	Meningitis
Herpes Simplex Virus, by PCR (Neonate 0-14 days)	All Positives

## BLOOD BANK

Transfusion Reactions	All Positives
Type and Screens	All Positives
Crossmatches	Unable to locate compatible red cells

## **MICROBIOLOGY**

- Positive Cerebral Spinal Fluid cultures or gram stain results
- Positive Blood Culture or gram stain results
- Positive Cryptococcal Antigen results
- Positive VRE (Vancomycin Resistant Enterococcus) results on inpatients upon initial isolation
- Positive MRSA (Methicillin Resistant Staph Aureus) results on inpatients upon initial isolation
- Positive HSV (Herpes Simplex Virus) on babies
- Positive Histoplasma, Coccidiomycosis, Blastomyces and Mycobacterium, including AFB (Acid Fast Bacillus) smears.
- All rapid HIV test results will be called to the respective Hospital Occupational Health during normal business hours. After normal business hours; (1) For Omaha CHI Health Hospitals and CHI Health Laboratories, call 402-717-OUCH and ask for the Occupational on call nurse (unless a call back number has been provided); (2) Mercy Hospital CB, call results to the hospital Emergency Department; (3) Regional Hospitals, call results to their respective hospital Emergency Department.
- Hepatitis A – Results will be called to 402-444-7214, Nebraska Department of Health. Inpatient results will be called to the caregiver immediately.

\*All positive infectious disease test results that are called to a CHI Health Laboratory by the performing reference laboratory are to be treated as a critical value in that immediate reporting must be made. Please refer to Laboratory policy, “Communicable Disease and Poisonings” for the directions on what notifications are needed and what documentation is required.