

CRITICAL TEST VALUES – LABORATORY

CHEMISTRY

TEST	LEVEL I ALERT Within 1 HOUR	LEVEL II ALERT WITHIN 24 HOURS	LEVEL III ALERT WITHIN 3 DAYS
Glucose (adult)	HIGH greater than 400		
	LOW less than 55		
Potassium	HIGH greater than 6		
	LOW less than 2.8		
Phosphorus	LOW less than 1.0		
Sodium	HIGH greater than 160		
	LOW less than 120		
Bicarbonate	LOW less than 10		
Bicarbonate	LOW 10 to 15 First instance only	LOW 10 to 15 Not the first instance	
Magnesium	HIGH greater than 5 First instance only. May tolerate higher levels for L&D patients.	HIGH greater than 5 Not first instance. May tolerate higher levels for L&D patients.	
	LOW less than 1 First instance only	LOW less than 1 Not first instance	
Calcium (Total or ionized)	HIGH greater than 13 total, greater than 6 ionized. First instance only.	HIGH greater than 13 total, greater than 6 ionized. Not first instance.	
	LOW less than 7 total, less than 3.5 ionized. First instance only.	LOW less than 7 total, less than 3.5 ionized. Not first instance.	
Troponin	HIGH Indicative of an acute MI. First incidence only.		
Lactic Acid	HIGH greater than 5. First instance only.	HIGH greater than 5. Not first instance.	
SGOT		HIGH greater than 500 First instance only.	
SGPT		HIGH greater than 500 First instance only.	
BUN		HIGH greater than 100 First instance only.	
Creatinine	HIGH greater than 2.5. First instance only. RISE of 1.0 or greater.	HIGH greater than 4. First incidence only.	
Amylase		HIGH greater than 500 First incidence only.	
Lipase		HIGH greater than 200 First instance only.	
TSH			HIGH greater than 50
			LOW less than 0.1
Lead			HIGH greater than 25
Blood Gas pH	HIGH greater than 7.6		
	LOW less than 7.2		
Blood Gas pO2	LOW less than 60		

CRITICAL TEST RESULTS – LABORATORY

TOXICOLOGY AND THERAPUTIC DRUG MONITORING

TEST	LEVEL I ALERT WITHIN 1 HOUR	LEVEL II ALERT WITHIN 24 HOURS	LEVEL III ALERT WITHIN 3 DAYS
Acetaminophen	HIGH greater than 50. First instances only	HIGH greater than 50. Not first instance and higher than previous values	
Acetone	HIGH greater than 20mg/dL First instance only		
Carboxyhemoglobin	HIGH greater than 5% First instance only		
Ethanol	HIGH greater than 400mg/dL First instance only		
Ethylene Glycol	HIGH greater than 25mg/dL First instance only		
Isopropanol	HIGH greater than 40mg/dL First instance only		
Lithium	HIGH greater than 1.8 First instance only		
Methanol	HIGH greater than 20mg/dL First instance only		
Salicylate	HIGH greater than 30 First instance only		
Digoxin	HIGH greater than 2.5mg/ml		
Procainamide	HIGH greater than 12mcg/ml		
Procainamide +NAPA	HIGH greater than 30mcg/ml		
Quinidine	HIGH greater than 6mcg/ml		

HEMATOLOGY

TEST	LEVEL I ALERT WITHIN 1 HOUR	LEVEL II ALERT WITHIN 24 HOURS	LEVEL III ALERT WITHIN 3 DAYS
HCT	HIGH greater than 60		
	LOW less than 22		
	Drop greater than 10		
Hemoglobin	HIGH greater than 20		
	LOW less than 7		
	Drop greater than 3		
Platelets	HIGH greater than 1000k First instance only		
	LOW less than 30k First instance only		
WBC	HIGH greater than 35k First instance only		
	LOW less than 1k First instance only		
Manual Diff		Blasts or Malignant cells, First instance only	
Malaria/Babesiosis Smear	Positive		
INR	HIGH greater than 5	HIGH greater than 4-5	
PTT	HIGH greater than 120		

CRITICAL TEST RESULTS – LABORATORY

STAINS – CULTURES – PCR – ANTIGENS/TOXINS

TEST	LEVEL I ALERT WITHIN 1 HOUR	LEVEL II ALERT WITHIN 24 HOURS	LEVEL III ALERT WITHIN 3 DAYS
CSF Stain	Positive (bacteria or fungus)		
Blood Culture Stains	Positive		
Fluids from joints or other body cavity that are usually sterile (except urine)	Positive		
STAT OR specimens for Gram Smear	Positive		
Indian Ink (for cryptococcus)	Positive		
PCP Silver Stain	Positive		
AFB Smear		Positive (inpatient)	Positive (outpatient)
Blood Cultures	Positive for bacteria or fungus		
CSF cultures	Positive		
Cultures of fluids from joints or other body cavity that are usually sterile (except urine)	Positive		
Wound Culture	Positive for Clostridium		
AFB culture and susceptibility			Positive
VRE/MRSA/VRSA from surveillance		Positive	
Stool			Salmonella, Shigella, Yersenia, Campylobacter, Vibrio, E Coli 0157
HSV PCR	Positive CSF		
Cryptococcus	Positive		
Hemophilus Influenza	Positive		
Neisseria Meningitidis	Positive		
Clostridium Difficile		Positive	
Neisseria Gonorrhoea			Positive (outpatient only)
Chlamydia Trachnomatis			Positive (outpatient only)

PATHOLOGY

TEST	LEVEL I	LEVEL II	LEVEL III
			Unexpected diagnosis of clinically significant malignancies and other pathologies
			Diagnosis of pre-cancerous lesions (example high grade dysplasia on pap smears, Barrets Esophagus)