



IRL Critical Values - 2008 Final

All Clinical Tox values have been approved by all PharmDs.
All Microbiology values have been approved by all ID docs.

INTEGRATED REGIONAL LABORATORIES		
2008 IRL SYSTEM CRITICAL VALUES		
ANALYTE	LESS THAN OR EQUAL TO	GREATER THAN OR EQUAL TO
CHEMISTRY		
Ammonia – Neonatal & Pediatric (<18 years)		107 mcmmol/L
Bilirubin – (cord blood)		2.0 mg/dl
Bilirubin – (0-1 month)		13.0 mg/dl
Calcium (0-3 months)	7 mg/dl	14 mg/dl
Calcium	6.5 mg/dl	13 mg/dl
Calcium Ionized (Adult)	0.8 mmol/L	1.5 mmol/L
Chloride	70 mmol/L	120 mmol/L
CO ₂	10 mmol/L	40 mmol/L
Creatinine **		7.5 mg/dl
Glucose (Newborn)	40 mg/dl	200 mg/dl
Glucose (7 days – 1 year)	50 mg/dl	200 mg/dl
Glucose – (Adult)	45 mg/dl	425 mg/dl
Glucose – CSF (Adult)	40 mg/dl	200 mg/dl
Lactic Acid		3.5 mmol/L
Magnesium	1 mg/dl	5 mg/dl
Phosphorus (added 11/02)	1.2 mg/dl	
Potassium (0-2 months)	2.5 mmol/L	7.5 mmol/L
Potassium (2 months – 1 year)	3.0 mmol/L	6.2 mmol/L
Potassium (adult)	3.0 mmol/L	6.0 mmol/L
Sodium	120 mmol/L	160 mmol/L
Triglyceride – Neonatal (<28 days)	10 mg/dl	400 mg/dl
Urea Nitrogen – Neonatal & Pediatric (< 5 years)		80 mg/dl
<p>* 2M-1Y potassium upper critical value changed to 6.2 mmol/L in 5/2001, but not corrected on this critical value list until 2/3/06 – was changed in Meditech in 5/2001: no effect on patient care. **Creatinine Critical values will be called the same day with the initial Critical Value and then once a week for any additional Critical Value to avoid unnecessary physician calling.</p>		
HEMATOLOGY AND COAGULATION		
APTT – not on anticoagulants		55 seconds
APTT – on anticoagulants		100 seconds
APTT – neonatal (<28 days)		62 seconds

INR		5.0
Fibrinogen	101 mg/dl	
Hematocrit (0 – 2 months)	30%	75%
Hematocrit (adult)	21%	60%
Hemoglobin (0 – 7 days)	10.0 g/dl	24.9 g/dl
Hemoglobin (8 days – 2 months)	10.0 g/dl	21.5 g/dl
Hemoglobin - Adult	7 g/dl	20.0g/dl
Platelet	30 x10 ³	1 million
Absolute granulocytes (0 – 1 month)	<0.5 K/uL	>50.0 K/uL
Absolute granulocytes (> 1 month)	1 x 10 ³	
WBC	2 x 10 ³	50 x 10 ³
BLOOD BANK		
Inability to find compatible blood		
ANALYTE	LESS THAN OR EQUAL TO	GREATER THAN OR EQUAL TO
CLINICAL PHARMACOLOGY: GENERAL		
Acetaminophen (changed 2005 from 50 to >0 mcg/mL c PharmD-Path Med Dir approval)		> 0 mcg/ml **
Ethanol		300 mg/dl
Iron (<10 years)		300 mcg/dl
Lead (<6 years)		46 mcg/dl
Lead (>6 years)		71 mcg/dl
Mercury		>150 mcg/L
Methotrexate		5.0 mcmol/L
Salicylate		30 mcg/dl
CLINICAL PHARMACOLOGY: THERAPEUTIC DRUGS		
Caffeine (<4 wks)		31 mcg/ml
Caffeine (>4 wks)		51 mcg/ml
Carbamazepine		15 mcg/ml
Digoxin		2.5 ng/ml
Gentamicin Peak		12.1 mcg/ml
Gentamicin Trough		2.1 mcg/ml
Lidocaine (added 2/29/03)		9.0 mcg/ml
Lithium		2.0 mmol/L
Phenobarbital		50 mcg/ml
Phenobarbital – Neonatal (<28 days)		60 mcg/ml
Phenytoin		30 mcg/ml
Procainamide + NAPA		30.1 mcg/ml
Quinidine		5.1 mcg/ml
Theophylline		25.1 mcg/ml
Theophylline – Neonatal (<28 days)		25.0 mcg/ml
Tobramycin – Peak		12.1 mcg/ml
Tobramycin – Trough		2.1 mcg/ml
Valproic Acid		101 ug/ml
Vancomycin – Peak		51 mcg/ml
**Vancomycin – Trough ADULT		20.1 mcg/ml
** = changed in 2005, Northwest & Palms West kept 15.1 mcg/ml = Pediatric value		

MICROBIOLOGY ANALYTES		
Agents	NOTIFICATION TIMEFRAMES	
	IMMEDIATE (upon positive result)	SAME DAY OR NEXT MORNING
Anthrax	X	
AFB Smear and/or culture	X	
Blood Culture and/or Gram Stain	X	
Body fluid-sterile site: clin sig pathogenic bact	X	
Botulism (Clostridium botulinum)	X	
Brucellosis	X	
Burkholderia mallei (Glanders) or pseudomallei (Melioidosis)	X	
Calymmatobacterium granulomatis		X
Campylobacter		X
Chlamydia/GC probe		X
Chlamydophila psittaci		X
Chancroid		X
Cholera	X	
CJD	X	
Clostridium difficile		X
Clostridium perfringens from wound	X	
Clostridium tetani		X
Coxiella burnetti		X
Cryptococcal Antigen Test	X	
Cryptosporidium		X
CSF Culture and/or Gram Stain	X	
Cyclospora		X
Dengue		X
Diphtheria	X	
Environmental/Dyalisis Water >200 CFU		X
Ehrlichia		X
Encephalitis		X
ESBL (Extended Spectrum Beta-Lactamase)		X
EHEC (Shiga Toxin prod. E.coli) including EC O157:H7	X	
Fungus – dimorphic or systemic		X
Giardia		X
Haemophilus influenza (meningitis and invasive disease)	X	
Haemophilus ducreyi (Chancroid)		X
Hantavirus infection	X	
Hepatitis A	X	
Hepatitis B,C,D,E,G		X

Hepatitis B surf ag, pregnant women, kids<25mos		X
Human Papilloma Virus		X
HSV 1 and 2		X
India Ink	X	
Influenza A		X
Influenza due to novel or pandemic strains	X	
Legionella		X
Leptospira		X
Listeriosis	X	
Lyme		X
Malarial Smear	X	
Measles (Rubeola)	X	
MRSA		X
Meningococcal Disease (Neisseria meningitidis)	X	
Multiple Drug Resistant Organism (isolate resistant to all agents routinely tested)	X	
Mumps	X	
Mycobacterium tuberculosis	X	
Mycobacterium leprae	X	
N. gonorrhoeae		X
Outbreaks (institutions, foodborne, waterborne) and symptom/syndrome clusters that may indicate the presence of an outbreak	X	
Ova & Parasites		X
Pertussis	X	
Plague (Yersinia pestis)	X	
Poliomyelitis	X	
Rabies	X	
Rickettsia	X	
Rotavirus antigen	X	
Rubella	X (acute)	
Salmonella		X
SARS	X	
Shigella		X
Smallpox (Variola virus)	X	
Streptococcus Group B – Vaginal source	X	
Streptococcal disease, invasive Group A	X	
<i>Streptococcus pneumoniae</i> , penicillin drug resistant	X	
Surgical Tissue Culture and/or Gram Stain	X	
Syphilis (<i>Treponema pallidum</i>)- RPR (latex titer called)	X	
Syphilis (<i>T. pallidum</i>) in pregnant women and neonates	X	

Toxoplasma		X
Trichomonas wet prep	X	
Tularemia (Franciscella tularensis)	X	
Typhoid fever (Salmonella typhi)	X	
Vaccinia virus disease	X	
Vancomycin Resistant Enterococcus (VRE)		X
Vancomycin Resistant Staphylococcus aureus (VISA, VRSA)	X	
Varicella virus (Chickenpox)		X
Vibrio cholerae	X	
Vibrio (non-cholerae Vibrio species)		X
Viral culture: 0 – 6 months	X	
Viral hemorrhagic fevers (Ebola, Marburg, Filoviruses)	X	
Venezuelan equine encephalitis	X	
West Nile virus		X
Yellow fever	X	
Yersinia pestis (Plague)	X	
Yellow fever	X	