

## Critical Values / Semi-Urgent Results List

### PURPOSE

The purpose of this list is to identify the laboratory tests results that are classified as critically high, critically low, or semi-urgent by the Department of Laboratory Medicine and Pathology. This list pertains to testing that is performed in Rochester, Arizona, Florida, Mayo Clinic Health System (MCHS) and MCL performing sites.

**NOTE:** Not all the below mentioned tests are done in each facility. A few of the tests have differing values due to instrumentation/methodology differences and are noted with an \*.

### DEFINITION

**A Critical Value / Critical Result is defined as:** A value/result that represents a pathophysiological state at such variance with normal (expected values) as to be life-threatening unless something is done promptly and for which some corrective action could be taken.

**NOTE:** The critical values/results do not necessarily correspond directly with normal reference ranges, toxic ranges, or therapeutic ranges.

**NOTE:** In addition to the critical values identified on this list, critical alerts from testing referred to outside laboratories (non-Mayo) will be communicated to clients in accordance with notification standards once those performing laboratories notify Mayo.

**A Semi-Urgent result is defined as:** A result or finding, which can be unexpected or ambiguous, that does not pose an immediate health threat but has near term severe health consequences if not acknowledged and/or treated.

**NOTE:** Only the first instance of a specific situation is considered a semi-urgent result. Results classified as critical take precedent over a semi-urgent classification.

### HEMATOLOGY CRITICAL VALUES

Test Report Name	Age	Critical Low	Critical High	Units
Activated Partial Thromboplastin Time, Plasma	Any	–	≥ 150	sec
Fibrinogen	Any	≤ 60	–	mg/dL
Hemoglobin	0 – 7 weeks	≤ 6.0	≥ 24.0	g/dL
	> 7 weeks	≤ 6.0	≥ 20.0	g/dL
INR (International Normalizing Ratio)	Any	–	≥ 5.0	
Leukocytes	Any	–	≥ 100.0	x10(9)/L
Absolute Neutrophil Count	Any	≤ 0.5	–	x10(9)/L
Neutrophils	Any	≤ 0.5	–	x10(9)/L
Platelets, Blood**	Any	≤ 40	≥ 1000	x10(9)/L
CSF White Blood Cell Count	Any	–	≥ 100.0	Cells/mcL

\*\* All Platelet counts ≤ 10 in Arizona will be called at every occurrence.

### HEMATOLOGY SEMI-URGENT RESULT

Test	Age	Semi-Urgent Result	Units
ADAMTS13 Activity	Any	10%	%

### CHEMISTRY CRITICAL VALUES

Test Report Name	Age	Critical Low	Critical High	Units
Ammonia	≥ 1 yr	–	≥ 200	mcmol/L
	< 1 yr	–	≥ 100	mcmol/L
Bilirubin Total, Serum	< 1 yr	–	≥ 15.0	mg/dL
	Any	≤ 6.5	≥ 13.0	mg/dL
Calcium, Total	< 1 yr	≤ 2.0	≥ 6.0	mg/dL
	Any	≤ 6.5	≥ 13.0	mg/dL
Calcium, Ionized, Blood	< 1 yr	≤ 3.0	≥ 6.5	mg/dL
	Any	≤ 3.0	≥ 6.0	mg/dL
*Calcium, Ionized, Blood - Florida (Deviation due to methodology difference)	< 1yr	≤ 3.0	≥ 5.5	mg/dL
	≥ 1 yr	≤ 3.0	≥ 6.0	mg/dL
Carbon Monoxide (Carboxyhemoglobin Level)	Any	–	≥ 20	%
	1 day – 4 weeks	–	≥ 1.5	mg/dL
Creatinine, Blood/Plasma/Serum	5 weeks – 23 mos	–	≥ 2.0	mg/dL
	2 yrs – 11 yrs	–	≥ 2.5	mg/dL
	12 yrs – 15 yrs	–	≥ 3.0	mg/dL
	16 yrs – 17 yrs	–	≥ 10.0	mg/dL
Creatine Kinase, Total	Any	–	≥ 10,000	U/L
	< 50 yrs	–	≥ 7.8	ng/dL
FT4 (Free Thyroxine)	≥ 50 yrs	–	≥ 6.0	ng/dL
	< 4 weeks	≤ 40	≥ 400	mg/dL
Glucose, Plasma/Serum	≥ 4 weeks	≤ 50	≥ 400	mg/dL
	Any	≤ 1.0	≥ 9.0	mg/dL
Magnesium, Serum	Any	≤ 190	≥ 390	mOsm/Kg
Osmolality	Any	≤ 7.200	≥ 7.600	pH
*pH (MCHS and AZ only)	Any	≤ 20.0	≥ 70.0	mmHg
*pCO2, arterial (MCHS and AZ only)	Any	≤ 40.0	–	mmHg
*pO2 (MCHS and AZ only)	Any	≤ 1.0	–	mg/dL
Phosphorus	Any	≤ 2.5	≥ 6.0	mmol/L
Potassium	Any	≤ 120	≥ 160	mmol/L

### TOXICOLOGY / THERAPEUTIC DRUG MONITORING CRITICAL VALUES

Test Report Name	Age	Critical Low	Critical High	Units
Acetaminophen, S	Any	–	> 150 4 hours after dose	mcg/mL
Acetone (Volatile Screen), applies to all specimen types	Any	–	Any value detected	mg/dL
Amitriptyline and Nortriptyline, S	Any	–	> 500	ng/mL
Butalbital, S	Any	–	≥ 10	mcg/mL
Caffeine, S	Any	–	≥ 30	mcg/mL
Carbamazepine, Total, S	Any	–	≥ 15.0	mcg/mL
Carbamazepine, Free, S	Any	–	≥ 4.0	mcg/mL
Clomipramine + Norclomipramine, S	Any	–	> 450	ng/mL

**TOXICOLOGY / THERAPEUTIC DRUG MONITORING CRITICAL VALUES CONTINUED**

Test Report Name	Age	Critical Low	Critical High	Units
Cyanide, B	Any	–	≥ 2.0	mcg/mL
Desipramine, S	Any	–	>400	ng/mL
Digoxin, S	Any	–	≥ 4.0	ng/mL
Disopyramide, S	Any	–	≥ 7.0	mcg/mL
Doxepin and Nordoxepin, S	Any	–	> 500	ng/mL
Ethanol, Blood	Any	–	≥ 400	mg/dL
Ethanol, Serum	Any	–	≥ 400	mg/dL
Ethosuximide, S	Any	–	> 150	mcg/mL
Ethylene Glycol, S	Any	–	≥ 20	mg/dL
Imipramine and Desipramine, S	Any	–	> 400	ng/mL
Isopropanol (Volatile Screen), applies to all specimen types	Any	–	Any value detected	mg/dL
Lidocaine, S	Any	–	> 6.0	mcg/mL
Lead, Blood	0 – 15 yrs	–	≥ 20	mcg/dL
	≥ 16 yrs	–	≥ 70	mcg/dL
Lithium, S	Any	–	> 1.6	mmol/L
Methanol (Volatile Screen), applies to all specimen types	Any	–	Any value detected	mg/dL
Nortriptyline, S	Any	–	> 500	ng/mL
Phenobarbital, S	Any	–	≥ 60.0	mcg/mL
Phenytoin, Total, S	Any	–	≥ 30.0	mcg/mL
Phenytoin, Free, S	Any	–	≥ 2.5	mcg/mL
Primidone and Phenobarbital, S				
Primidone	Any	–	≥ 15.0	mcg/mL
Phenobarbital		–	≥ 60.0	mcg/mL
Procainamide, S				
Procainamide	Any	–	> 12	mcg/mL
N-Acetylprocainamide		–	≥ 40	mcg/mL
Quinidine, S	Any	–	≥ 6.0	mcg/mL
Salicylates, S	Any	–	≥ 50.0	mg/dL
Theophylline, S	Any	–	> 20	mcg/mL
Trimipramine, S	Any	–	> 500	ng/mL
Valproic Acid, Free and Total, S				
Free Valproic Acid	Any	–	> 30	mcg/mL
Total Valproic Acid		–	≥ 151	mcg/mL
Valproic Acid, Total, S	Any	–	≥ 151	mcg/mL

**MICROBIOLOGY CRITICAL AND SEMI-URGENT RESULTS**

Analyte	Test Method	Age	Specimen Source	Semi-Urgent	Critical
Acanthamoeba sp.	Molecular	Any	Any		X
	Culture	Any	Central Nervous System (CNS) / eye		X
		<= 1 month	Respiratory Sources, Sources other than those below	X	
Adenovirus	Molecular	Any	Critical Sources (CSF, Ventricular fluid, Ocular sources, Brain sources, Amniotic fluid)		X
		Any	Plasma, Stool	X	
Any Fungal Organism	Culture	Any	Blood, Critical Sources (CSF, Ventricular fluid, Ocular sources, Brain sources, Amniotic fluid)		X
		Any	Fresh tissue or biopsy: heart valve, liver, lymph node, spleen, or skin tissue papule/lesion/nodule	X	
Arcobacter sp.	Culture	Any	Any	X	
Astrovirus	Molecular	Any	Stool	X	
B. pertussis Ab, IgG, S	Serology	Any	Serum	X	
Babesia spp.	Smear	Any	Blood	X	
Babesia ssp.	Molecular	Any	Blood	X	
Bacillus anthracis	Culture	Any	Any		X
	Culture	Any	Any	X	
Bartonella spp.	Molecular	Any	Blood, CSF, Ocular		X
		Any	Fresh tissue or biopsy: heart valve, liver, lymph node, spleen, or skin tissue papule/lesion/nodule	X	
Blastomyces Ag, Quant EIA, U	Serology	Any	Urine	X	
Blastomyces species complex	Culture and Molecular	Any	Any	X	
Bordetella parapertussis	Molecular	Any	NP Swabs	X	
Bordetella pertussis	Culture	Age at collection: D0-D36	Any		X
		Age at collection: D36-Y120	Any	X	
		0D-1M	NP Swabs		X
Borrelia miyamotoi	Molecular	Any	Nasopharyngeal swab	X	
		Any	CSF, Blood		X
Borrelia ssp	Molecular	Any	CSF, Synovial, Tissue	X	
Brucella Ab, Agglutination, S	Serology	Any	Blood		X
		Any	CSF, Serum	X	
Brucella sp. (may become a select agent when speciated)	Culture	Any	Any		X
Burkholderia mallei	Culture and Molecular	Any	Any		X
Burkholderia pseudomallei	Culture and Molecular	Any	Any		X
C. difficile	Culture	Any	Any	X	
C. difficile toxin	Molecular	Any	Stool	X	
Calif Virus (LaCrosse)IgG and IgM,S	Serology	Any	Serum	X	
Calif (LaCrosse) Encep Ab Panel, CSF	Serology	Any	CSF	X	

**MICROBIOLOGY CRITICAL AND SEMI-URGENT RESULTS CONTINUED**

Analyte	Test Method	Age	Specimen Source	Semi-Urgent	Critical
Calif Virus (LaCrosse)	Molecular	Any	CSF		X
<i>Campylobacter</i> sp.	Culture	Any	Any	X	
	Molecular	Any	Stool	X	
<i>Candida auris</i>	Culture	Any	Critical Sources (CSF, Ventricular fluid, Ocular sources, Brain sources, Amniotic fluid)		X
		Any	Non-critical sources (all other sources)	X	
Chikungunya IgM and IgG, Ab, S	Serology	Any	Serum	X	
Chikungunya virus	Molecular	Any	CSF		X
			Serum	X	
<i>Chlamydia pneumoniae</i>	Molecular	Any	Lower Respiratory		X
<i>Chlamydia trachomatis</i>	Molecular	<=15 years	Any	X	
<i>Chlamydophila pneumoniae</i>	Molecular	Any	NP Swabs		X
<i>Clostridium botulinum</i>	Culture	Any	Any		X
<i>Coccidioides</i> sp.	Culture	Any	Any		X
	Molecular				X
<i>Corynebacterium diphtheriae</i>	Culture	Any	Any		X
<i>Coxiella burnetii</i> PCR	Molecular	Any	Fresh tissue or biopsy: lung, bone, liver, heart valve, aorta, or endocardium, blood, serum		X
Coxiella burnetii Antibodies	Serology	Any	Serum, CSF		X
<i>Cronobacter (Enterobacter) sakazakii</i>	Culture	<=1 year	Any	X	
<i>Cryptococcus neoformans/gattii</i>	Molecular and Culture	Any	CSF		X
<i>Cryptosporidium</i> sp.	Molecular	Any	Stool	X	
<i>Cyclospora cayetanensis</i>	Molecular	Any	Stool	X	
		≤35 days	Any	X	
Cytomegalovirus	Molecular	Any	Critical Sources (CSF, Ventricular fluid, Ocular sources, Brain sources, Amniotic fluid)		X
Dengue virus	Molecular	Any	CSF		X
			Serum	X	
E.coli 0157 H7	Culture	Any	Any - MML		X
E.coli 0157 H7 & unable to detect H7 antigen	Culture	Any	Any - In house		X
East Equine Encephalitis Antibody, IgG and IgM	Serology	Any	Serum, CSF		X
<i>Echinococcus</i> spp.	Smear	Any	Any	X	
<i>Ehrlichia/Anaplasma</i>	Molecular	Any	Blood		X
<i>Entamoeba histolytica</i>	Molecular	Any	Stool	X	
Enteropathogenic <i>E. coli</i> (EAEC)	Molecular	Any	Stool	X	
<i>Enterococcus</i> group	Culture	Any	VANCX = R		X
Enteropathogenic <i>E. coli</i> (EPEC)	Molecular	Any	Stool	X	
Enterotoxigenic <i>E. coli</i> (ETEC)	Molecular	Any	Stool	X	

**MICROBIOLOGY CRITICAL AND SEMI-URGENT RESULTS CONTINUED**

Analyte	Test Method	Age	Specimen Source	Semi-Urgent	Critical
Enterovirus	Molecular	CSFME only	Any	CSF	
		<=35 days	Critical Sources (CSF, Ventricular fluid, Ocular sources, Brain sources, Amniotic fluid)	X	
		>35 days	Critical Sources (CSF, Ventricular fluid, Ocular sources, Brain sources, Amniotic fluid)	X	
Epstein-Barr virus (EBPV)	Molecular	<=35 days	Critical Sources (CSF, Ventricular fluid, Ocular sources, Brain sources, Amniotic fluid)	X	
		>35 days	Critical Sources (CSF, Ventricular fluid, Ocular sources, Brain sources, Amniotic fluid)	X	
<i>Escherichia coli</i> K1	CSFME	Any	CSF		X
<i>Escherichia coli</i> O157 serotype	Culture and Molecular	Any	Stool	X	
<i>Filaria/Trypanosomes</i>	Smear	Any	Blood		X
<i>Francisella tularensis</i>	Culture	Any	Any		X
<i>Francisella tularensis</i> Ab, IgM and IgG	Serology	Any	Serum	X	
Giardia	Molecular	Any	Stool	X	
<i>Haemophilus ducreyi</i>	Culture	Any	Any	X	
<i>Haemophilus influenza</i>	Molecular	Any	CSF		X
		Any	Sterile body fluid or normally sterile tissue	X	
		Any	Blood, cerebrospinal or ventricular fluid, Epiglottis		X
Hepatitis A IgM Ab	Serology	Any	Serum, CSF	X	
Herpes simplex virus 1 or 2	Molecular	<=35 days	Any		X
		Any	Blood, Critical Sources (CSF, Ventricular fluid, Ocular sources, Brain sources, Amniotic fluid)		X
<i>Histoplasma</i> Ag	Serology	Any	Serum		X
<i>Histoplasma</i> species complex	Culture and Molecular	Any	Any		X
Human herpes virus 6	Molecular	<=35 days			X
		>35 days	CSF		X
		Any			X
Human Parechovirus	Molecular	Any	CSF		X
IMP Resistance Gene	Molecular	Any	Any	X	
JC Virus	Molecular	<=35 days			X
		>35 days	CSF		X
<i>Kingella kingae</i> PCR	Molecular	Any	Fresh tissue, biopsy bone or FFPE: joint, synovium, heart valve, aorta, or endocardium. Synovial fluid		X
			Blood		X
<i>Kingella</i> sp.	Culture	Any	Any	X	
KPC Resistance Gene	Molecular	Any	Any	X	
mecA/C and MREJ	Molecular	Any	Any	X	

**MICROBIOLOGY CRITICAL AND SEMI-URGENT RESULTS CONTINUED**

Analyte	Test Method	Age	Specimen Source	Semi-Urgent	Critical
<i>Legionella</i> spp.	Molecular Culture	Any	Any	X	X
<i>Leishmania</i> spp.	Smear	Any	Any	X	
<i>Leptospira</i> spp. Antibody IgM	Serology	Any	Serum, CSF	X	
<i>Listeria monocytogenes</i>	Molecular Culture	Any	CSF Any	X	X
<i>M. pneumoniae</i>	Molecular and Culture	Any	CSF Any	X	X
Measles	Molecular	Any	Urine, Throat	X	
Measles Antibody, IgG and IgM	Serology	Any	Serum, CSF	X	
mecA PCR	Molecular	Any	Organism in pure culture	X	
mpox (clade 1, clade 2)	Molecular	Any	Skin lesion swab		X
<i>Mucorales</i> (Genus: <i>Rhizopus</i> , <i>Mucor</i> , <i>Rhizomucor</i> , <i>Lichtheimia</i> ( <i>Absidia</i> ), <i>Apophysomyces</i> )	Culture	Any	Non-critical sterile tissue (including skin biopsy), Sinus or para-nasal tissue or fluid, Bone marrow, Non-critical sterile body fluids (except urine), BALAV fluid, Open lung biopsy, Sputum, washes (>2 colonies per culture)		X
Mumps	Molecular	Any	Urine, Throat	X	
Mumps Ab, IgG and IgM	Serology	Any	Serum, CSF	X	
<i>Mycobacteria</i> or actinomycete	Culture	Any	Blood, Critical Sources (CSF, Ventricular fluid, Ocular sources, Brain sources, Amniotic fluid)		X
<i>Mycobacterium tuberculosis</i> complex	Culture	Any	Blood, Critical Sources (CSF, Ventricular fluid, Ocular sources, Brain sources, Amniotic fluid)		X
	Molecular		Non-critical sources	X	
		Any	CSF, Blood, Plasma		X
<i>Mycoplasma hominis</i>	Molecular	Any	Vaginal, cervix, urethra, urogenital, chest/mediastinal; bronchus or lung (donor swab); or sputum, tracheal secretions, bronchial washings, bronchoalveolar lavage, lung; or nasal washings (Note: Nasal washings may only be submitted for infants <3 months of age) Pelvic, peritoneal, amniotic, prostatic secretions, semen, reproductive drainage or fluid, pleural/chest, chest tube, pericardial. Synovial fluid. Urine (first void), kidney/bladder stone, or ureter. Tissue: Placenta, products of conception, urogenital, respiratory, bronchus, chest/mediastinal, bone, spine, or joint		X
<i>Mycoplasmodies</i> sp	Culture	Any	Any	X	
<i>Naegleria fowleri/Balamuthia</i>	Culture and Molecular	Any	Any		X
NDM Resistance Gene	Molecular	Any	Any	X	

**MICROBIOLOGY CRITICAL AND SEMI-URGENT RESULTS CONTINUED**

Analyte	Test Method	Age	Specimen Source	Semi-Urgent	Critical
<i>Neisseria gonorrhoea</i>	Molecular	<=15 years	Any	X	
		Any	CSF		X
	Culture	Y0-Y15	Any	X	
<i>Neisseria gonorrhoeae / polysaccharea</i>	Culture	Any	Any	X	
<i>Neisseria meningitidis</i>	CSFME	Any	CSF		X
Neonatal Sepsis Newborn	Culture	<7 days old	Blood	X	
<i>Vibrio</i> species (other not <i>V. cholerae</i> )	Culture	Any	Any	X	
<i>Yersinia</i> species (other not <i>Y. pestis</i> )	Culture	Any	Any	X	
OXA-48 and VIM	Molecular	Any	Isolates and Any Source	X	
OXA-like Resistance Gene	Molecular	Any	Varies	X	
<i>Paracoccidioides brasiliensis</i>	Culture	Any	Any		X
Parvovirus B19	Molecular	<=35 days	CSF, brain, amniotic fluid, ocular fluid/tissue/scraping		X
		>35 days		X	
<i>Plasmodium</i> spp. (all species)	Molecular and Smear	Any	Blood		X
<i>Plesiomonas shigelloides</i>	GIP	Any	Stool	X	
<i>Pneumocystis jirovecii</i>	Molecular	Any	Any		X
Powassan virus	Molecular	Any	CSF		X
	Serology	Any		Serum	
Rotavirus	Molecular	Any	Stool	X	
<i>Salmonella</i> sp.	Culture	Any	Any		X
	Molecular	Any	Stool	X	
Sapovirus	Molecular	Any	Stool		X
Shiga toxin	Molecular	Any	Stool		X
Shiga toxin producing <i>E. coli</i>	Molecular	Any	Stool		X
<i>Shigella</i> sp	Culture	Any	Any		X
<i>Shigella</i> /Enteroinvasive <i>E. coli</i>	Molecular	Any	Stool		X
<i>Sporothrix schenckii</i>	Culture	Any	Any		X
Spotted Fever Ab, IgG and IgM	Serology	Any	Serum, CSF		X
St. Louis Encephalitis Antibody, IgG and IgM	Serology	Any	Serum, CSF		X
Staphylococcus aureus & <i>S. aureus</i> complex (Vanco= I & Vanco= R)	Culture	Any	Any		X
Staphylococcus aureus & <i>S. aureus</i> complex (Oxacillin = R)	Culture	Any	Any		X
<i>Streptococcus agalactiae</i> (Group B)	Culture	Any	Blood, Critical Sources (CSF, Ventricular fluid, Ocular sources, Brain sources, Amniotic fluid)		X
		Any	Sterile Sources	X	
	Molecular	Any	CSF, Plasma		X

**MICROBIOLOGY CRITICAL AND SEMI-URGENT RESULTS CONTINUED**

Analyte	Test Method	Age	Specimen Source	Semi-Urgent	Critical
<i>Streptococcus pyogenes</i> (Group A)	Culture	Any	Blood/plasma/serum, Critical Sources (CSF, Ventricular fluid, Ocular sources, Brain sources, Amniotic fluid)		X
	Culture	Any	Sterile Sources but not Critical Sources (CSF, Ventricular fluid, Ocular sources, Brain sources, Amniotic fluid)	X	
<i>Streptococcus pneumoniae</i>	Culture	Any	MML, Sterile Sources but not Critical Sources (CSF, Ventricular fluid, Ocular sources, Brain sources, Amniotic fluid)		X
	Molecular	Any	CSF	X	
	Culture	Any	Blood/plasma/serum, Critical Sources (CSF, Ventricular fluid, Ocular sources, Brain sources, Amniotic fluid)	X	
<i>Strongyloides</i> larvae	Smear	Any	Non-intestinal sites	X	
<i>Syphilis</i> Ab, IgG	Serology	Any	Serum, CSF	X	
<i>Talaromyces (Penicillium) marneffei</i>	Culture	Any	Any	X	
<i>Toxoplasma gondii</i>	Molecular or Smear	Any	Any	X	
<i>Treponema pallidum</i>	Molecular	Any	CSF	X	
<i>Tropheryma whipplei</i> PCR	Molecular	Any	CSF, Brain, Ocular Fluid		X
			Fresh tissue, biopsy, FFPE: small intestine (duodenum, ileum, or jejunum), lymph node, bone, joint, synovial, liver, pancreas, spleen, lung, heart valve (and other heart tissues), or brain.	X	
		Any	Blood		X
<i>Ureaplasma</i> PCR	Molecular	Any	Any	X	
			Blood, Plasma, Amniotic Fluid	X	
<i>Varicella Zoster Virus</i>	Molecular	<=35 days	CSF, brain, amniotic fluid, ocular fluid/tissue/scraping		X
		>35 days	CSF, brain, amniotic fluid, ocular fluid/tissue/scraping	X	
<i>VDRL (Syphilis) Titer</i>	Serology	Any	CSF	X	
<i>Vibrio cholerae</i>	Culture and Molecular	Any	Any	X	
<i>Vibrio species</i>	Molecular	Any	Stool	X	
<i>VIM Resistance Gene</i>	Molecular	Any	Varies	X	
<i>VRE</i> PCR	Molecular	Any	Stool, perianal, perirectal, rectal, anal	X	
West Nile Virus	Molecular	Any	Blood, Serum, Urine		X
			CSF		X
Western Equine Encephalitis Antibody, IgG and IgM	Serology	Any	Serum, CSF		X
			Serum, CSF	X	
<i>Yersinia pestis</i>	Culture	Any	Any		X
<i>Yersinia species</i>	Molecular	Any	Stool	X	
Zika Virus	Molecular and Serology	Any	Serum, Urine	X	

\*Sterile sources = Blood/plasma/serum, cerebrospinal fluid, brain tissue, amniotic fluid, ocular fluid/corneal scrapings per Mayo Clinic Laboratories Critical Values / Critical Results List.

\*\*Other sterile sources = sterile specimens collected OTHER THAN: Blood/plasma/serum, cerebrospinal fluid, brain tissue, amniotic fluid, ocular fluid/corneal scrapings.

**NOTE:** In the event of an outbreak of a novel contagious microorganism, detection of such an organism may be considered a critical result.