

**Critical Results:**

Critical test results are reported to a licensed caregiver within 30 minutes.

Test	Units	Critical Value(s)	Age
Acetaminophen Blood	ug/mL	< 50	< 18Y
		≥ 40.0	≥ 18Y
Activated Partial Thromboplastin Time	Seconds	> 60.0	< 18Y
		≥ 160.0	≥ 18Y
Ammonia	μmol/L	> 108	<18Y
Base Excess Arterial Cord	mmol/L	< -10.0	Unspecified
Base Excess Capillary	mmol/L	< -6.0	Unspecified
Base Excess Venous Cord	mmol/L	< -10.0	Unspecified
Bicarbonate Arterial	mmol/L	≤ 12 or ≥ 40	Unspecified
Bicarbonate Capillary	mmol/L	≤ 15.0 or ≥ 35.0	Unspecified
Bilirubin Total Cord Blood	mg/dL	> 4.0	Unspecified
Bilirubin Total Neonatal	mg/dL	> 14.9	0D – 1M
Blast Cells – Manual Diff	%	> 1	< 18Y
Calcium Serum/Plasma	mg/dL	< 6.0 or > 13.0	Unspecified
Carbon Dioxide CO <sub>2</sub>	mmol/L	≤ 9 or ≥ 40	Unspecified
Carboxyhemoglobin (Carbon Monoxide, CO)	%	> 20.0	Unspecified
Digoxin	ng/mL	≥ 3.0	Unspecified
Ethanol Blood	mg/dL	> 10	< 18Y
		≥ 400	≥ 18Y
Fibrinogen	mg/dL	<100	Unspecified
Gentamicin Peak Gentamicin Random	ug/mL	≥ 12.0	Unspecified
Gentamicin Trough	ug/mL	≥ 2.0	Unspecified
Glucose Serum/Plasma	mg/dL	< 40 or > 300	< 18Y
		≤ 50 or ≥ 500	≥ 18Y
Hematocrit	%	< 18 or > 60	Unspecified

Hemoglobin	g/dL	< 6 or > 20.0	Unspecified
Heparin Unfractionated (anti-Xa activity)	U/mL	> 1.0	Unspecified
INR	N/A	> 4.0 > 5.0	< 18Y ≥ 18Y
Lactate Whole Blood	mmol/L	> 2.0	Unspecified
Lithium Serum	mmol/L	> 1.5	Unspecified
Magnesium Serum/Plasma	mg/dL	≤ 1.2 or ≥ 6.0	Unspecified
Methemoglobin	%	≥ 3.0	Unspecified
Neutrophils Absolute	10 <sup>9</sup> /L	≤ 0.9	Unspecified
pCO <sub>2</sub> Arterial	mmHg	< 20 or > 75 ≤ 20 or ≥ 70	< 18Y ≥ 18Y
pCO <sub>2</sub> Capillary	mmHg	< 30 or > 65	Unspecified
pCO <sub>2</sub> Venous	mmHg	< 20 or > 75 ≤ 20 or ≥ 70	< 18Y ≥ 18Y
pH Arterial	N/A	< 7.0 or > 7.6 ≤ 7.2 or ≥ 7.6	< 18Y ≥ 18Y
pH Arterial Cord	N/A	<7.000	Unspecified
pH Capillary	N/A	< 7.200 or > 7.550	Unspecified
pH Venous	N/A	< 7.100 or > 7.589	Unspecified
pH Venous Cord	N/A	< 7.000	Unspecified
Phenytoin Total	ug/mL	≥ 30.0	Unspecified
Phosphorus Serum/Plasma	mg/dL	≤ 1.0	Unspecified
Platelet Count	10 <sup>9</sup> /L	< 25 or > 1000	Unspecified
pO <sub>2</sub> Arterial	mmHg	≤ 39	Unspecified
pO <sub>2</sub> Capillary	mmHg	< 35 or > 100	Unspecified
Potassium Serum/Plasma/Whole Blood	mmol/L	< 2.5 or > 6.0	< 18Y

		$\leq 2.5$ or $\geq 6.4$	$\geq 18Y$
Salicylate Blood	mg/dL	$\geq 40.0$	Unspecified
Sodium Serum/Plasma/Whole Blood	mmol/L	$< 120$ or $> 165$ $\leq 120$ or $\geq 160$	$< 18Y$ $\geq 18Y$
tCO <sub>2</sub> Arterial	mmol/L	$\leq 12$ or $\geq 40$	Unspecified
Triglycerides	mg/dL	$\geq 1500$	Unspecified
Vancomycin Peak Vancomycin Random	ug/mL	$\geq 80.0$	Unspecified
Vancomycin Trough	ug/mL	$\geq 35.0$	Unspecified
White Blood Cell Count	10 <sup>9</sup> /L	$< 1.5$ or $> 70.0$	Unspecified

Critical Results	Healthcare Provider	Infection Prevention	Micro Leadership	CDPHE	Other
<b>AFB</b> Positive culture from CSF	X	X	X		
<b>Blood culture</b> Gram stain positive on first bottle for each morphology identified  Subsequent positive bottle(s) with the same organism(s) drawn on the same day do not require provider notification	X				
<b>Blood Culture</b> Gram stain positive for GNDC (suggestive of Neisseria meningitidis)	X	X	X		
<b>CSF</b> Gram stain or culture positive for any organism	X				
<b>CSF</b> Gram stain positive for GNDC (suggestive of Neisseria meningitidis)	X	X	X		
<b>Eye</b> Gram stain or culture positive for GNR or mold/mycotic elements HSV positive molecular test	X				
<b>Sterile body fluids</b> Gram stain positive from the following sources:  amniotic eye vitreous peritoneal or ascites pericardial pleural synovial	X				
<b>Sterile tissues</b> Gram stain positive from the following sources:  brain eye heart spinal cord	X				

epidural					
<b>Blood products</b> associated with transfusion Gram stain or culture positive					*
*Call blood bank medical director, pathologist on-call, or designee for positive gram stain or culture					

<b>Organism/Test</b>	<b>Healthcare Provider</b>	<b>Infection Prevention</b>	<b>Micro Leadership</b>	<b>CDPHE</b>	<b>Other</b>
<b>Acid Fast Bacillus</b> Positive direct smear and cultures	X				
<b>AFB</b> – <i>Mycobacterium tuberculosis</i> or <i>M. tuberculosis</i> complex, 1 <sup>st</sup> occurrence <ul style="list-style-type: none"> <li>Positive PCR (Mtb-Rif)</li> <li>Identification of <i>M. tuberculosis</i> from culture</li> </ul>	X	X	X		
<b>Biothreat/Bioterrorism Agents</b> (identification of or unable to rule out) <ul style="list-style-type: none"> <li>Bacillus anthracis</li> <li>Brucella species</li> <li>Burkholderia mallei</li> <li>Burkholderia pseudomallei</li> <li>Francisella tularensis</li> <li>Yersinia pestis</li> </ul>	X	X	X	X	Submit organism
<b>Bordetella pertussis</b> Positive inpatients Amplivue or BioFire Respiratory PCR panel	X	X			
<b>Body fluids</b> positive for bacterial or fungal growth <i>unless positive direct gram stain previously called</i>  amniotic eye vitreous peritoneal or ascites pericardial pleural synovial	X				
<b>Sterile tissues</b> positive for bacterial or fungal growth <i>unless positive direct gram stain previously called:</i>	X				

brain eye heart spinal cord epidural					
Candida auris or Candida haemulonii Identified or suspected		X	X	Submit organism	
DNA probes positive for: • Coccidioides immitis • Blastomyces dermatitidis • Histoplasma capsulatum	X		X		
<i>Haemophilus influenzae</i> From sterile sites including blood cultures		X		Submit organism	
Mucorales  Positive cultures from sinus, orbit of eye, brain or CSF	X				
<i>Neisseria meningitidis</i> From sterile sites including blood cultures	X	X	X	Submit organism	
<b>Resistant Organisms</b> positive cultures on inpatients once per admission per organism MDRO (multi-drug resistant organisms) CRE (Carbapenem Resistant Enterobacteraceae) ESBL (Extended Spectrum Beta Lactamase) MRSA (Methicillin Resistant <i>Staph aureus</i> ) VISA (Vancomycin Intermediate <i>Staph aureus</i> ) VRE (Vancomycin Resistant Enterococcus) VIE (Vancomycin Intermediate Enterococcus)	X				
<b>Staph aureus in Blood Cultures</b>  New positive Staph aureus or MRSA in blood cultures		X			

<i>Salmonella typhi</i> in blood or stool	X	X		Submit organism	
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