

 <p>central peninsula hospital 250 Hospital Place Soldotna, AK 99669</p>	<b>POLICY TITLE:</b> Attachment A - Critical Value Reporting	<b>DEPARTMENT:</b> LABORATORY <b>CATEGORY:</b> Procedure <b>SECTION:</b> General
	<b>POLICY NUMBER:</b> CPGH.903.081 att.1	<b>EFFECTIVE DATE:</b> August, 2023 <b>Original Date of Policy: 11/99</b>
	<b>AUTHORIZED BY:</b> Laboratory Medical Director	<b>Revised:</b> LAB.700.110 – 8/16; (GL-506 - 11/99, 4/00, 10/00, 8/07, 1/09, 8/09, 4/10, 12/12, 11/15, 1/20 <b>CPGH.903.081 attachment</b> , 2/20, 2/21,8/22 <b>Reviewed:</b> 4/00,10/00, 8/07, 1/09, 8/09, 4/10, 12/12, 11/15, 12/19, 1/20, 8/23

**I. HEMATOLOGY CRITICAL VALUES**

CEREBROSPINAL FLUID	LOW	HIGH
CSF nucleated cells	-----	≥ 5 WBC/mm <sup>3</sup>
CSF protein	-----	> 100 mg/dl

COAGULATION	LOW	HIGH
Fibrinogen	< 100 mg/dl	-----
Prottime	-----	INR ≥6.0
PTT	-----	≥ 100 seconds

HEMATOLOGY	LOW	HIGH
Absolute Neutrophil	< 0.5 K cells/mm <sup>3</sup>	-----
HEMATOCRIT		
0 up to 3 days old	-----	> 67.6 %
3 up to 14 days old	< 24 %	> 65 %
14 up to 1 month old	< 24 %	> 60 %
1 month and older	< 21 %	> 60 %
HEMOGLOBIN		
0 up to 1 day old	< 12.6 g/dL	> 21 g/dL
1 up to 3 days old	< 13.6 g/dL	> 22.6 g/dL
3 up to 7 days old	< 12.6 g/dL	> 21.6 g/dL
7 up to 14 days old	< 11.6 g/dL	> 21.6 g/dL
14 days up to 1 month old	< 9.1 g/dL	> 18 g/dL
1 month and older	< 7 g/dL	> 18 g/dL
PLATELETS		
0 day up to 18 years old	< 50 K cells/mm <sup>3</sup>	> 1,000 K cells/mm <sup>3</sup>
18 years and older	< 10 K cells/mm <sup>3</sup>	> 1,000 K cells/mm <sup>3</sup>
WBC		
0 up to 1 day old	< 8 K cells/mm <sup>3</sup>	> 30 K cells /mm <sup>3</sup>
1 day up to 1 month old	< 5 K cells/mm <sup>3</sup>	> 25 K cells /mm <sup>3</sup>
1 month up to 1 year old	< 6 K cells/mm <sup>3</sup>	> 25 K cells /mm <sup>3</sup>
1 year up to 10 years old	< 3 K cells/mm <sup>3</sup>	> 25 K cells /mm <sup>3</sup>
10 years and older	< 1 K cells/mm <sup>3</sup>	> 25 K cells /mm <sup>3</sup>
New Blasts	-----	> 2%

## II. CHEMISTRY CRITICAL VALUES

<b>CHEMISTRY</b>	<b>LOW</b>	<b>HIGH</b>
Ammonia	-----	≥ 100 umol/L
CO2	<12 mmol/L	>45 mmol/L
Calcium	≤ 6.0 mg/dL	≥ 14.0 mg/dL
Calcium-Ionized	< 0.55 mmol/L	> 1.51 mmol/L
CSF protein	-----	> 100 mg/dl
Glucose - 0 up to 7 days old	< 40 mg/dL	> 500 mg/dL
Glucose - 1 week and older	< 50 mg/dL	> 500 mg/dL
Lactic Acid	-----	> 2 mmol/L
Magnesium	≤ 1.0 mg/dl	≥ 4.7 mg/dl
Osmolality	< 265 mOsm/Kg	> 320 mOsm/kg
Phosphorus	≤ 1.0 mg/dl	-----
Potassium	≤ 2.5 mmol/L	≥ 6.0 mmol/L
Sodium	< 120 mmol/L	≥ 160 mmol/L
Total Bilirubin - 0 to 15 day old	-----	≥ 15.0 mg/dL
Troponin T	-----	> 0.01 ng/mL

<b>SPECIAL CHEMISTRY</b>	<b>LOW</b>	<b>HIGH</b>
Acetaminophen	-----	≥ 50 mcg/ml
Alcohol	-----	≥ 400 mg/dl
Carbamazepine	-----	≥ 12 mcg/ml
Digoxin	-----	≥ 2.5 ng/ml
Gentamicin peak	-----	> 12 mcg/ml
Gentamicin random	-----	> 12 mcg/ml
Gentamicin trough	-----	> 2 mcg/ml
Lithium	-----	≥ 2.0 mmol/L
Phenytoin (Dilantin)	-----	≥ 30 mcg/ml
Salicylate (Acetylsalicylic acid)	-----	≥ 45 mg/dl
Tobramycin peak	-----	>12 mcg/ml
Tobramycin random	-----	>12 mcg/ml
Tobramycin trough	-----	>2 mcg/ml
Valproic Acid	-----	≥ 150 mcg/ml
Vancomycin trough	-----	>25 mcg/ml

<b>BLOOD GAS</b>	<b>LOW</b>	<b>HIGH</b>
Arterial/Venous pCO2	≤ 15 mm Hg	≥ 70 mm Hg
Arterial/venous pH	≤ 7.2	≥ 7.6
Arterial Cord pH	≤ 7.1	≥ 7.6
Arterial pO2	≤ 40 mm Hg	-----
HCO3	≤ 10 mmol/L	≥ 45 mmol/L
Cord blood Base Excess	-----	>16 mmol/L
Carboxyhemoglobin	-----	≥ 20 %

### **III. MICROBIOLOGY CRITICAL VALUES**

1. First positive blood culture (of a set) or gram stain and/or positive Blood Culture ID (BCID), unless it differs from previous
2. Any positive cerebrospinal fluid Gram stain or culture.
3. Any indication of Clostridium in a wound culture.
4. Any positive TB smear or culture (these are send outs).
5. GI panel positive for Salmonella, pathogenic E. coli 0H157, Vibrio, Shigella, Campylobactor, Yersinia, and/or C. difficile.
6. Any positive systemic fungus culture.
7. Any positive tissue, joint, bone, pericardial, pleural, peritoneal fluid culture, or gram stain.
8. All positive newborn or infant cultures.
9. Any positive eye culture with a suspected pathogen.
10. Any positive culture or gram stain on a transfusion reaction workup.
11. Any MRSA isolated on an inpatient.
12. Respiratory panel – Call positive Influenza, B. pertussis and Mycoplasma pneumonia, RSV, and/or SARS-CoV-2
13. Influenza, SARS-CoV-2, or RSV on a single test system
14. C. difficile on a single test system
15. Any positive N. gonorrhoea or C. trachomatis on a single test system
16. Strep A screen positive confirmatory culture
17. Positive MTB/RIF PCR NAAT.

### **IV. BLOOD BANK CRITICAL VALUES**

1. Any delay in the blood bank such as:
  - a. Inability to procure blood or blood components in the quantity requested including availability of undesignated units for a requested type/screen.
  - b. Delay in filling a pre-operative crossmatch request on a surgical patient.
  - c. Incompatible crossmatch on any patient.
  - d. Any newly identified/suspected antibody detected during the crossmatch or type/screen regardless of whether the crossmatch is compatible.
  - e. Any identified or suspected transfusion reaction.
2. A positive antibody screen/antibody identification in prenatal/postnatal patients not definitively due to Rh Immunoglobulin injection (RhIG).
3. Any positive blood culture of a unit involved in a transfusion reaction.
4. Emergency released blood - later found to be incompatible.
5. Positive DAT for patients less than 1 year.
6. Positive fetal screen.