**QA.REPORT.1.1** [Title]

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| **Chemistry** | | |
| **Test** | **Critical Value(s)** | **QLS Priority\*** |
| Acetaminophen | > 150 mcg/mL | Priority 1 |
| Alcohol, Blood/Ethanol (< 21 years) | > 10 mg/dL | Priority 1 |
| Alcohol, Blood/Ethanol (≥ 21 years) | > 300 mg/dL | Priority 1 |
| Amikacin (pre/base/trough) | > 10.0 mcg/mL | Priority 1 |
| Amikacin (post/peak) | > 35.0 mcg/mL | Priority 1 |
| Bilirubin, Total (< 1 day)§ | > 12.0 mg/dL | Priority 1 |
| Bilirubin, Total (1 day)§ | > 13.0 mg/dL | Priority 1 |
| Bilirubin, Total (2 days)§ | > 15.0 mg/dL | Priority 1 |
| Bilirubin, Total (3 days to <15 days)§ | > 18.0 mg/dL | Priority 1 |
| Bilirubin (15 days to 2 years) | > 20.0 mg/dL | Priority 1 |
| Caffeine (< 1 month) | > 30.0 mcg/mL | Priority 1 |
| Caffeine (≥ 1 month) | > 50.0 mcg/mL | Priority 1 |
| Calcium | < 6.0 mg/dL or >13.0 mg/dL | Priority 1 |
| Calcium, Ionized | < 0.68 mmol/L or > 1.58 mmol/L | Priority 1 |
| Carbamazepine | > 20.0 mcg/mL | Priority 1 |
| Carbon Monoxide | > 10.0% | Priority 1 |
| Digoxin | > 2.5 ng/mL | Priority 1 |
| Gentamicin (pre / base / trough) | > 2.0 mcg/mL | Priority 2 |
| Gentamicin (post/ peak) | > 15.0 mcg/mL | Priority 2 |
| Glucose (< 29 days) Fasting, Random | < 40 mg/dL or > 150 mg/dL | Priority 1 |
| Glucose (≥ 29 days) Fasting, Random | < 40 mg/dL or > 500 mg/dL | Priority 1 |
| Glucose, CSF | < 21 mg/dL | Priority 1 |
| Lactate | > 3.4 mmol/L | Priority 1 |
| Lidocaine | > 9.0 mcg/mL | Priority 1 |
| Lithium | > 1.5 mmol/L | Priority 1 |
| Magnesium | < 1.0 mg/dL or > 7.0 mg/dL | Priority 1 |
| Methotrexate (24 hours) | > 5.00-10.00 umol/L | Priority 1 |
| Methotrexate (48 hours) | > 0.50 – 1.00 umol/L | Priority 1 |
| Methotrexate (72 hours) | > 0.20 umol/L | Priority 1 |
| Mysoline | > 15.0 mcg/mL | Priority 1 |
| pCO2 Arterial, capillary | < 20 mm Hg or > 70 mm Hg | Priority 1 |
| pCO2 Venous (< 29 days) | < 25 mm Hg or > 75 mm Hg | Priority 1 |
| pH, Arterial, Venous | < 7.20 or > 7.60 | Priority 1 |
| pH, Arterial Cord | < 7.15 or > 7.50 | Priority 1 |
| pH, Venous Cord | < 7.15 or > 7.60 | Priority 1 |
| Phenobarbital | > 60.0 mcg/mL | Priority 1 |
| Phenytoin | > 40.0 mcg/mL | Priority 1 |
| Phosphorus | < 1.2 mg/dL or > 8.9 mg/dL | Priority 1 |
| pO2, Arterial, Capillary | < 41mm Hg | Priority 1 |
| Potassium, Serum < 29 days (nonhemolyzed) | < 2.6 mmol/L or > 6.5 mmol/L | Priority 1 |
| Potassium, Serum ≥ 29 days (nonhemolyzed) | < 2.8 mmol/L or > 6.4 mmol/L | Priority 1 |
| Potassium, Plasma < 29 days (nonhemolyzed) | < 2.6 mmol/L or > 6.5 mmol/L | Priority 1 |
| Potassium, Plasma ≥ 29 days (nonhemolyzed) | < 2.8 mmol/L or > 6.4 mmol/L | Priority 1 |
| Salicylate | > 30.0 mg/dL | Priority 1 |
| Sodium | < 120 mmol/L or > 160 mmol/L | Priority 1 |
| Theophylline | > 20.0 mcg/mL | Priority 1 |
| Tobramycin (pre, base, trough) | > 2.0 mcg/mL | Priority 2 |
| Tobramycin (post, peak, random) | > 10.0 mcg/mL | Priority 2 |
| Uric Acid | > 15.0 mg/dL | Priority 2 |
| Valproic Acid | > 150 mcg/mL | Priority 1 |
| Vancomycin (post, peak) (< 19 years) | > 45 mcg/mL | Priority 1 |
| Vancomycin (pre, base, trough) (< 19 years) | > 20 mcg/mL | Priority 1 |
| **Hematology, Coagulation, Urinalysis** | | |
| **Test** | **Critical Value(s)** | **QLS Priority** |
| WBC (blood) | > 74,999 absolute granulocytes/mm3 | Priority 1 |
| WBC (blood; ≤30 days) **ST MARY’S MEDICAL CENTER ONLY** | ≤ 3,000 or ≥ 30,000 /mm3 | Not applicable |
| WBC (blood; >30 days) **ST MARY’S MEDICAL CENTER ONLY** | ≤ 1,000 or ≥ 30,000 /mm3 | Not applicable |
| WBC (CSF) | > 10/mm3 | Priority 1 |
| Hematocrit (< 15 days) | < 28% | Priority 1 |
| Hematocrit (≥15 days) | < 18% | Priority 1 |
| Hemoglobin | < 6 g/dL | Priority 1 |
| Platelets (< 12 years) | < 50,000/mm3 or > 1,000,000/mm3 | Priority 1 |
| Platelets (≥ 12 years) | < 20,000/mm3 or > 1,000,000/mm3 | Priority 1 |
| Platelets (≤ 30 days) **ST MARY’S MEDICAL CENTER ONLY** | ≤ 100,000 or ≥ 1,000,000 /mm3 | Not applicable |
| Platelets (> 30 days) **ST MARY’S MEDICAL CENTER ONLY** | ≤ 20,000 or ≥ 1,000,000 /mm3 | Not applicable |
| Differential | Any blast cells or parasites | Priority 1 |
| Absolute Granulocytes/mm3  (SEGSA) | < 0.4 k/ mm3 absolute neutrophils | Priority 2 |
| PT (INR) | INR <0.5 or >4.99 | Priority 1 |
| PTT | ≥ 99 sec | Priority 1 |
| Fibrinogen | < 50 mg/dl or > 600 mg/dL | Priority 1 |
| Factor VIII Inhibitor | ≥1 BU | Priority 1 |
| Factor IX Inhibitor | ≥1 BU | Priority 1 |
| Heparin | All Results | Priority 1 |
| Heparin Dependent Antibody | Positive | Priority 2 |
| Urine Glucose (< 1 year) | any positive result | Priority 1 |
| Urine Ketones (< 1 year) | >80 mg/dL | Priority 1 |
| Urine Crystals | Cystine, Leucine, Tyrosine | Priority 1 |
| Lamellar Bodies | < 16000 μL | Priority 1 |
| Malaria Smear | Positive | Priority 1 |
| **Transfusion Medicine** | | |
| **Test** | **Critical Value(s)** | **QLS Priority** |
| Requests for Blood Products | Any delay in blood supply or blood components for transfusion. | Blood Bank to call |
| Transfusion Reaction Evaluations | Transfusion reactions when results show evidence of a hemolytic reaction. | Blood Bank to call |
| Kleihauer-Betke | STAT or abnormal results | Priority 1 |

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| **Microbiologic Results Indicating Pathologic Conditions\*\*** | | |
| **Test** | **Critical Value(s)** | **QLS Priority** |
| Inpatients will be called to the unit, outpatients and nonpatients will be called to the physician. | | |
| AFB Culture or Direct Smear | Positive | Priority 1 |
| Blood Culture Bottle Smear Result, Initial Result\*\*\* | Positive | Priority 1 |
| *Clostridium difficile* Test | Positive | Priority 1 (Hospital inpatients and hospital clients only; initial only); Priority 2 for outpatients |
| Cryptococcal Antigen | Positive | Priority 1 |
| CSF Culture or Direct Smear (including India Ink prep) | Positive | Priority 1 |
| Culture of *E. Coli* O157 | Positive | Priority 2 |
| Culture of isolate posing a potential infection control risk such as Vancomycin Resistant *Enterococcus* (VRE), Methicillin Resistant *Staph aureus* (MRSA), multi-drug resistant organism (MDRO), Extended Spectrum Beta Lactamase (ESBL) producing *Enterobacteriaceae*, or Carbapenem Resistant *Enterbacteriaceae* (CRE) | Positive | Priority 1 (Hospital inpatients and hospital clients only; initial isolation only) |
| Culture of unusual isolate such as *Bacillus anthracis, Brucella* sp*, Burkholderia pseudomallei, Clostridium tetani, Corynebacterium diphtheriae, Francisella tularensis, Hemophilus ducreyi, Listeria monocytogenes, Yersinia pestis* or *pseudotuberculosis.* | Positive | Priority 1 |
| Eye Culture (only intraoperative or any case of *Pseudomonas aeruginosa*) | Positive | Priority 1 |
| Fungal Culture - *Histoplasma*, *Blastomyces*, *Coccidiodes*, *Paracoccidiodes*, or *Cryptococcus neoformans* | Positive | Priority 2 |
| Group A *Streptococcus*, Sterile Sites | Positive | Priority 2 |
| Herpes Culture (0 to 2 years of age) | Positive | Priority 1 |
| Histoplasmosis Antigen (HSTA) | Positive | Priority 1 |
| Influenza (inpatients only) | Positive | Priority 1 |
| Legionella Culture, DFA or Urine Antigen | Positive | Priority 1 (Hospital Inpatients and hospital clients only; initial isolation only) |
| Pertussis Smear or Culture | Positive | Priority 1 |
| Pneumocystis DFA | Positive | Priority 1 |
| Rotavirus EIA (0 to 2 years of age) | Positive | Priority 1 |
| RSV Antigen (0 to 2 years of age) | Positive | Priority 1 |
| Shiga Toxin | Positive | Priority 2 |
| Stool and Enteric Culture | Enteric pathogens including *Salmonella, Yersinia, Vibrio, Campylobacter* | Priority 1 (Hospital Inpatients only; if patient discharged result will be called to ordering physician) |
| Stool for O&P | Parasites found/identified | Priority 1 (Hospital Inpatients only; if patient discharged result will be called to ordering physician) |
| **Molecular** | | |
| **Test** | **Critical Value(s)** | **QLS Priority** |
| *Clostridium difficile,* PCR | Positive | Priority 1 (Hospital inpatients and hospital clients only; initial only); Priority 2 for outpatients |
| MRSA, PCR | Positive | Priority 1 (Hospital inpatients and hospital clients only; initial isolation only) |
| HSV 1/2, PCR (0 to 2 years of age, and CSF) | Positive | Priority 1 |
| Influenza (inpatients only) | Positive | Priority 1 |
| RSV, PCR (0-2 years of age) | Positive | Priority 1 |

\*The following definitions are only applicable to non-hospital registered (QLS) patients:

Priority 1 Results—These results are reported 24 hour/day and 7 days/week and include, but are not limited to, results considered “critical” according to the Clinical Laboratory Amendment of 1988 (CLIA; CFR493.1109f) and the College of American Pathologists (CAP Laboratory Accreditation Program and so designated by the MACL System Medical Director or designee and the Quality Assurance Resource Team (QART). Because test results cannot be fully interpreted without knowledge of the patient’s clinical condition and treatment, reasonable effort must be made to promptly communicate Priority 1 values after verification and release, allowing the provider to determine the clinical implications and possible need for immediate attention.

Priority 2 Results—These results are reported 7 am to 7 pm, 7 days/week and include those that may require attention prior to the receipt of routine laboratory reports. We will use reasonable efforts to promptly communicate these results the same day that results are released (up to 7 pm), or if released after 7 pm then promptly the next morning (after 7 am), 7 days/week. For nursing home or hospital facilities flagged in the call log, use reasonable efforts to communicate these results at any hour of the day, 7 days/week.

Priority 2WD Results—These results are reported 7 am to 7 pm, weekdays only. This category is used for prenatal genetic testing where it is important that the information be conveyed to the ordering physician but the call can reasonably be completed on the next work day. Other than not calling on weekends, Priority 2WD results should be handled the same as Priority 2 calls.

Priority 3 Results—These results are those that may require attention before receipt of the printed report; they apply to a limited subset of clients with no electronic means of receiving patient reports (ie, receiving mailed or courier-delivered reports) OR who have requested Priority 3 reporting in writing during the previous 12 months.

\*\*Other microbiology results indicating pathological conditions may be called if deemed significant by the testing microbiologist. Isolates that require send out to a reference laboratory for additional testing will be called if the results will be delayed > 72 hours beyond the expected turnaround time for the culture. Inpatients will be called to the unit, outpatients will be called to the physician, and patients from client hospital laboratory accounts outside the MACL laboratory network will be called to the client laboratory.

\*\*\*Subsequent blood culture smears positive for the same organism will not be called if collected within 4 days.

§ All hospital registered outpatient bilirubin results on babies <5 days old will be called to the ordering physician regardless of the bilirubin result