

**CRITICAL VALUES**  
**CLINICAL LABORATORY TEST RESULTS**  
**MercyOne Waterloo Medical Center**

Once a critical value has been determined, a licensed caregiver is notified within 10 minutes by the person performing the test.

LOW	TEST	HIGH
NONE	BUN	> 70.0 mg/dl*
NONE	CREATININE	> 3.0 mg/dl*
< 120 mEq/L	SODIUM, SERUM	> 155 mEq/L
< 3.2 mEq/L	POTASSIUM, serum	> 6.0 mEq/L
< 3.6 mEq/L	POTASSIUM, serum, newborn	> 8.0 mE
< 60 mg/dL	GLUCOSE, serum	> 500 mg/dL
< 50 mg/dL	GLUCOSE, serum, newborn	> 300 mg/dL
< 6 mg/dL	CALCIUM, serum	> 13 mg/dL
< 7.5 mg/dL	CALCIUM, HDU	> 12 mg/dL
< 14 mmol/L	CO2	> 40 mmol/L
NONE	T. BILI	> 15.0 mg/dL
NONE	PROTHROMBIN TIME (INR)	> 4.0
NONE	APTT, screen	> 40 seconds
NONE	APTT, on heparin	> 90 seconds
< 100 mg/dL	FIBRINOGEN	NONE
< 50,000 cu mm	PLATELET COUNT	> 1,000,000 cu mm
< 1,500 cu mm	LEUKOCYTE COUNT (WBC)	> 30,000 cu mm
< 10.0 gm/dL	HEMOGLOBIN, newborn	NONE
< 7.0 gm/dL	HEMOGLOBIN, pre-surgical adult	NONE
< 7.0 gm/dL	HEMOGLOBIN, out-patients adult	NONE
< 7.0 gm/dL	HEMOGLOBIN, in-patients adult	NONE
< 1.0 mg/dL	PHOSPHORUS - HDU	NONE
NONE	LACTIC ACID	1 <sup>st</sup> result > 2.0 mmol/L
None	TROPONIN I HIGH SENSITIVITY	Troponin I HS performed at Waterloo: Male 1 <sup>st</sup> result ≥ 53.48 pg/ml Female 1 <sup>st</sup> result ≥ 34.11 pg/ml and or a 20% increase from previous result.

**\*Non HDU patients**

CONFIRMED POSITIVE BLOOD CULTURES  
 POSITIVE CSF GRAM STAIN OR CULTURE  
 METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS (Inpatients)  
 VANCOMYCIN RESISTANT ENTEROCOCCUS  
 CLOSTRIDIUM DIFFICILE TOXIN and/or PCR assay  
 BORDETELLA PERTUSSIS  
 MYCOBACTERIUM TUBERCULOSIS  
 POSITIVE HIV ½ ANTIBODY  
 POSITIVE RSV - AGE ≤ 3 MONTHS  
 POSITIVE MALARIAL SMEAR  
 POSITIVE CULTURE OF STERILE BODY FLUIDS

DRUG LEVELS RUN IN-HOUSE ABOVE THE THERAPEUTIC RANGE MUST BE CALLED.

THE FOLLOWING VALUES ARE CONSIDERED CRITICAL VALUES IN THE BLOOD BANK:

1. Any "positive" on a transfusion reaction work-up.
2. Positive DAT on a cord blood work-up.
3. Positive DAT on a recently transfused patient.
4. Emergency Release needing in-vivo cross match checks.
5. Any hemolysis or increase in DAT strength noted on an in-vivo check.

Technologists will use their own discretion in determining whether or not other abnormal values should be called. Verbally reported critical values require a verification "read-back" of the test result by the person receiving the test result.

10/06/2020 CRITICAL VAL SERVICE MANUAL

Approved by:

Dr. William R. Kasten, MD