


Name of Policy:	STAT Tests Critical Tests and Critical Limits	 Effective Date: 6/4/2008 Initial Effective Date: 9/4/1989
Policy Number:	3364-107-107	
Department:	Pathology-Laboratory	
Approving Officer:	Director, Clinical Pathology/Hematopathology	
Responsible Agent:	Manager, Lab	
Scope:	Pathology-Laboratory	
<input type="checkbox"/> New policy proposal <input type="checkbox"/> Major revision of existing policy		<input type="checkbox"/> Minor/technical revision of existing policy <input checked="" type="checkbox"/> Reaffirmation of existing policy

(A) Policy Statement

Each lab department has established STAT turnaround times for tests and critical limits for tests requiring verification and notification.

(B) Purpose of Policy

To provide physician notification when test results indicate the need for prompt attention and patient care management.

(C) Procedure

1. STAT specimens must be delivered to the department immediately upon receipt and processing in the Central Lab office.
2. STAT tests take first priority over routine tests. Processing of STAT specimens must begin immediately. ED results should be reported within 30- 60 minutes unless manual verification of test results is indicated. All other STAT orders should also be reported within 30- 60 minutes unless manual verification of test results is indicated.
3. STAT results are called and/or electronically sent to the proper station immediately according to instruction. Significant delays in reporting results should be detailed on the department variance log. When significant delays are anticipated due to equipment, computer or staffing problems, the appropriate clinician must be notified and the contact documented.

Turnaround times of tests ordered STAT:

CBC	30 minutes
Urinalysis	30 minutes
Serum/Urine Pregnancy test	30 minutes
Type&Screen	40 minutes
Type&Cross	
Basic Metabolic Panel	30 minutes
Cardiac Panel	60 minutes
PT/PTT	30 minutes
Blood Type	15 minutes

Critical Tests:

Critical tests are defined as STAT tests received with request to “Call Results” and are called immediately upon completion. A comment is entered in the LIS indicating the time the result was sent or called and the name of

the person receiving/reading back the results. All results, if not sent electronically, MUST be *read back* by the recipient to ensure accuracy and understanding.

Critical Limits/Results:

The following are designated critical limits when seen in a new patient or a patient with marked changes from previous results:

TEST	LESS THAN	GREATER THAN
Chemistry		
Glucose	50 mg/dL	500 mg/dL
Potassium	2.5 mEq/L	6.0 mEq/L
Sodium	120 mEq/L	155 mEq/L
Total CO2	10 mEq/L	45 mEq/L
Calcium	6.5 mg/dL	12.0 mg/dL
Magnesium	1.3 mg/dL	4.0 mg/dL
Total Bilirubin (outpatient)		12.0 mg/dL
Cardiac Markers		
Troponin I		0.5 ng/mL (initial value)
CKMB Index		1.9 if total CK is >200 (initial)
Therapeutic Drugs		
Acetaminophen		150 mcg/mL (4 hour post ingestion)
Carbamazepine (Tegretol)		15 mcg/mL
Digoxin		2.0 ng/mL
Phenytoin (Dilantin)		20 mcg/mL
Phenobarbital		40 mcg/mL
Salicylic Acid (Aspirin)		30 mg/dL
Other Chemistry		
Ammonia		99 umol/L
Lactate		4.9 mmol/L (initial)
Hematology		
WBC	2000	50,000
Hgb	Less than or equal to 6	
Platelets	20,000	
Coagulation		
Prottime		50 secs
INR		4.9
PTT		160 secs.
D-Dimer		20.0

Microbiology:

- Any positive blood culture
- Any positive gram stain on CSF
- Positive cryptococcal antigen (CSF)
- Any positive bacterial antigen (CSF)

Other Critical Values:

Differential counts that include blasts on undiagnosed patient or patient in remission.

To notify physician:


- ❖ Outpatient - Call physician or RN in clinic for tests drawn in OPD. If there is not an RN working at the clinic, the physician must be notified. If this is an outpatient that has a non UTMC physician, call the

physician's office and ask to speak to an RN. If the office is closed or an RN is not available, the patient's physician or covering physician must be notified. At least 2 attempts are to be made to notify attending physician or covering physician via phone, pager, or hospital operator. If unable to locate physician or if no response is received, note failure to communicate result in laboratory computer system and fill out a laboratory occurrence report. Outpatient critical values should be called to the physician within 1 hour of critical result verification.

- ❖ In-patient and Emergency Department - Notify nursing unit and ask to speak to RN or physician responsible for patient. Inpatient and Emergency Department critical results should be called to caregiver with 15 minutes of verification of critical result.
- ❖ Note in "Test Comments" in the computer the time the results were checked and called and the name of the person receiving the report. Two patient identifiers and all results must be read back by the recipient to ensure accuracy and understanding.

(D) Definitions

1. STATs are tests that are ordered if the physician feels that results are needed immediately.
2. Critical Tests are defined as Stat tests received with a request to "Call Results"
3. Critical result is a test result that suggests a serious medical condition that may require immediate medical attention for the patient. A critical result can come from a non-critical test.

<p>Approved by:</p> <div style="text-align: center;">  _____ </div> <p style="text-align: center;">6-10-08 Date</p> <p>Robert L. Booth, Jr., M.D. Associate Professor Director, Clinical Pathology/Hematopathology</p> <p><i>Review/Revision Completed By:</i> Cynthia O'Connell - Manager, Lab</p>	<p>Review/Revision Date:</p> <p>9/29/92 9/22/98 10/06/03 4/02/2005 8/10/2005 8/04/2006 6/29/2007 6/04/2008</p> <hr/> <p>Next Review Date: 6/1/2011</p>
<p>Policies Superseded by This Policy: OP-07</p>	

It is the responsibility of the reader to verify with the responsible agent that this is the most current version of the policy.