

DEPARTMENT OF THE ARMY
US ARMY MEDICAL DEPARTMENT ACTIVITY
Fort Huachuca, Arizona 85613-7079

MEDDAC MEMORANDUM
40 -138

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Medical Services
FOLLOW-UP OF ABNORMAL TEST RESULTS

	PARA	PAGE
HISTORY -----	1	1
PURPOSE -----	2	1
SCOPE -----	3	1
REFERENCES -----	4	1
GENERAL -----	5	1
ABNORMAL TEST PROTOCOL-----	6	1
DIAGNOSTIC TESTING BY OUTSIDE SOURCES -----	7	2
PATHOLOGY -----	8	3
HEALTHCARE PROVIDER RESPONSIBILITIES -----	9	3
PERFORMANCE IMPROVEMENT RESPONSIBILITIES -----	10	3
APPENDIX A: Critical Laboratory Values-----		A-1
APPENDIX B: The Tumor Registrar-----		B-1

1. HISTORY. This issue publishes a revision of this publication.

2. PURPOSE. This program is designed to ensure appropriate follow-up of all abnormal test results.

3. SCOPE. This memorandum is applicable to all personnel assigned to Raymond W. Bliss Army Health Center.

4. REFERENCES.
 - 4.1 College of American Pathologist’s guidelines
 - 4.2 JCAHO Comprehensive Accreditation Manual for Ambulatory Care

5. GENERAL. This memorandum applies to tests performed within RWBAHC Departments of Radiology and Clinical Pathology.

6. ABNORMAL TEST PROTOCOL.
 - 6.1 Radiology:
 - 6.1.1 Radiology Priorities

*This publication revises MEDDAC MEMO 40-138, dtd 3 November 2004

6.1.1.1 STAT: Immediately

6.1.1.2 ASAP: Within 1 Hour

6.1.1.3 Routine: When patient arrives after STAT and ASAP requests are completed. Routine requests will be honored for up to 30 days.

6.1.2 Radiologist's Reading Priorities

6.1.2.1 "Immediate Reading Requested" patients

6.1.2.2 "STAT" patients

6.1.2.3 "ASAP" patients

6.1.2.4 Routine patients

6.1.3 All immediate reading requests shall be completed expeditiously and the paperwork placed in the immediate reading box in the Radiologists reading room. The Radiologist will read the exam and place the reading on a "STAT" line for medical transcription to put this exam on a priority transcription. This will then be verified by the Radiologist to be transferred to CHCS for the referring physician to view.

6.1.4 Any routine exam done that has a critical result will also be placed on the "STAT" line for priority transcription. Critical results are determined by the Radiologist if immediate follow up is required. The Radiologist will contact the requesting provider by pager or telephone to relay the initial reading results and inform them that an official reading will be in CHCS as soon as possible.

6.2 Laboratory:

6.2.1 The laboratory will report to the ordering Health Care Provider (HCP) those abnormal values which have been selected in consultation with all HCP's as within a critical range and requiring immediate attention. Critical values are listed at Appendix A

6.2.2 Any laboratory test performed within the lab having a designated critical value (ex: glucose) that gives an abnormal/critical result will be verified by repeat testing. The supervisor or a designated technician will immediately page or telephone the ordering HCP or his/her alternate if the abnormal value falls within a pre-assigned critical range

6.2.3 The time of call and the person notified will be annotated in the 'Comments' section of CHCS.

6.2.4 The following information will be annotated in the 'Comment' section of CHCS: Verified by repeat analysis, repeat value is: (enter repeat value), time reported and name/credential of provider or nurse reported to, value repeated or read back.

7. DIAGNOSTIC TESTING BY OUTSIDE SOURCES.

7.1 When an HCP orders a diagnostic study that is not available in the CHCS order entry pick list, the laboratory will ensure that the test is tracked from the time it is ordered until the results are sent to the HCPs and to the Patient Administration Division (PAD).

7.2 Perceived misdiagnosis or delays in testing will be evaluated by the Risk Management Committee.

8. PATHOLOGY.

8.1 The laboratory is the proponent for the tracking of tissue and PAP specimens collected by the organization. The tracking system for this is CHCS.

8.2 The tumor registrar, under the PAD Division identifies, researches, abstracts and codes reportable malignancies diagnosed at RWBAHC. The Patient Administration Division will ensure that the tumor registrar will provide a written report summarizing cases and issues to the Joint Integration Committee (JIC) meeting twice per year.

9. HEALTHCARE PROVIDER RESPONSIBILITIES.

9.1 Following receipt of a critical lab value, the HCP should verbally read back the critical result to lab personnel to ensure that the information was accurately transmitted.

9.2 Follow-up on the results of all testing done within RWBAHC and by outside sources.

9.3 Designate a surrogate provider to review all results returning during any prolonged absences by the ordering HCP.

10. PERFORMANCE IMPROVEMENT RESPONSIBILITIES.

10.1 The lab staff will report any systemic issues on DA Form 4106 (INCIDENT REPORT) to the Risk Management Coordinator for further processing.

10.2 Systemic issues regarding laboratory or diagnostic testing include, but are not limited to, delays in performing tests, delays in relaying results of tests, missed diagnoses, and appropriateness of follow-up.

The proponent of this publication is Ancillary Services. Users are invited to send comments and suggested improvements on DA Form 2028 directly to the Department of Pathology, RWBAHC, ATTN: MCXJ-DP, Fort Huachuca, AZ 85613-7079.

FOR THE COMMANDER:

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Appendix A Critical Laboratory Values

Some lab results clearly indicate the patient is in need of immediate attention or in serious danger; these are critical lab results and must be reported to the provider immediately. Following is a list of critical lab results. When these results are obtained in the laboratory, they should be reviewed by the section supervisor, repeated, and then immediately reported by **PAGER** or **PHONE** to the provider, or registered nurse. This report must be documented in CHCS and include the date, time, name of the person contacted, verified by repeat analysis, repeat value, and value repeated or read back. Leaving results on an answering machine is not acceptable.

NOTE: Any blood specimens that are grossly hemolyzed and are not drawn in the RWBAHC Laboratory will not be accepted.

LEGEND

* Sent to reference laboratory

		CHEMISTRY	
TEST		BELOW	ABOVE
Alcohol (ethanol)		None	≥ 300 mg/dl
Bilirubin (neonatal)	Premature Infant:	None	≥ 15 mg/dl
	Term Infant:	None	≥ 20 mg/dl
BUN	Adult:	None	≥ 50 mg/dl
	Infant:	None	≥ 30 mg/dl
Calcium	Adult:	≤ 6.0 mg/dl	≥ 12.0 mg/dl
	Newborn-13yr:	≤ 2.0 mg/dl	≥ 12.0 mg/dl
Carbon Dioxide	Adult:	≤ 10 mEq/L	≥ 41 mEq/L
	Children:	≤ 10 mEq/L	≥ 33 mEq/L
CK		NA	≥ 351 mg/dl
CKMB		NA	$\geq 5.5\%$ of total CK
Creatinine		NA	≥ 3.1 mg/dl
Glucose	Adult:	≤ 40 mg/dl	≥ 351 mg/dl
	Newborn-2weeks:	≤ 30 mg/dl	≥ 351 mg/dl
	2weeks-15yr:	< 40 mg/dl	≥ 351 mg/dl
	Urine	None	≥ 1000 mg/dl

Magnesium		≤ 0.9 mg/dl	> 5.1 mg/dl
Phosphorus		≤ 1.0 mg/dl	≥ 8.0 mg/dl
Potassium	0-1 Month:	≤ 2.5 mEq/L	≥ 8.0 mEq/L
	2 Months – Adult:	≤ 2.5 mEq/L	≥ 6.5 mEq/L
Sodium		≤ 124 mEq/L	≥ 156 mEq/L

THERAPEUTIC DRUGS

TEST		BELOW	ABOVE	PANIC
Carbamazepine (Tegretol)		None	≥ 8 ug/ml	10.1 ug/ml
Digoxin (Digoxin or Lanoxin)		None	≥ 2.5 ng/ml	2.55 ng/ml
Phenobarbitol		None	≥ 40 ug/ml	45 ug/ml
Phenytoin (Dilantin)		None	≥ 20 ug/ml	30.0 ug/ml
Salicylate	Adults:	None	≥ 300 mg/dl	
	Children:	None	≥ 100 mg/dl	
Theophylline		None	≥ 20 ug/dl	25.0 ug/dl

HEMATOLOGY

TEST	BELOW	ABOVE
Hematocrit	$\leq 20\%$	$\geq 55\%$
Newborn:	$\leq 33\%$	$\geq 65\%$
Hemoglobin	≤ 7.0 gm/dl	≥ 19 gm/dl
Newborn:	≤ 9.0 gm/dl	≥ 22.5 gm/dl
Fibrinogen	≤ 70 mg/dl	None
Partial Thromboplastin Time (PTT, APTT)	None	> 60 seconds
Platelet Count	Adult: $\leq 20,000/\text{mm}^3$	$\geq 1,000,000/\text{mm}^3$
Pediatric/Newborn:	$\leq 30,000/\text{mm}^3$	$\geq 1,000,000/\text{mm}^3$
Prothrombin Time (Protime, PT)	None	≥ 40 seconds
WBC	$\leq 2,500/\text{mm}^3$	$\geq 25,000/\text{mm}^3$

Qualitative Critical Results

Hematology

- Presence of blasts on blood smear.
- New diagnosis or findings of leukemia.
- Presence of sickle cells (or aplastic crisis).

Microbiology

- Positive results of gram stain from sterile body fluid.
- Positive blood culture.
- Salmonella, Shigella, Yersinia, or E.coli 0157 on stool culture.
- Positive RSV.

IMMUNOLOGY

- Positive RPR (test for Syphilis)

CLINICAL MICROSCOPY AND URINALYSYS

- Presence of malignant cells, blasts, or microorganisms in body fluids.
- Combination of strongly positive test results (4+) for glucose and ketones in urine.
- Presence of pathological crystals (i.e.: urate, cystine, leucine, or tyrosine) in urine.
- Presence of large numbers of casts in urine.

APPENDIX B
The Tumor Registrar

MEMORANDUM THRU CHIEF OF PAD

FOR CHIEF, PATHOLOGY

SUBJECT: Tumor Registry

The Tumor Registrar identifies, researches, abstracts and codes reportable malignancies diagnosed at RWBAHC. This is done by case finding, to include review of disease index, pathology reports, contacts with Radiology Department, correspondence from other medical facilities where the patients were referred and diagnosis confirmed, and from follow-up correspondence received from Referral Tracking Office. Tumor Registrar provides written monthly tumor registry report to Chief of PAD.

The Tumor Registrar enters the cancer cases into the Automated Central Tumor Registry (ACTUR). Tumor Registrar responsibilities include lifetime follow-up of the cancer patients, first by reviewing patient treatment records, next by contacts with other medical facilities (physicians/tumor registries) where patients were referred, followed by contact with the patients through follow-up letters and telephone calls. Tumor Registrar reviews incoming follow-up correspondence from other medical facilities on cancer patients, xeroxes copies, hand carries originals to Out Patient Records, and updates treatment in ACTUR to maintain consistent and accurate follow-up treatment documentation.

Tumor Registrar provides assistance to patients to include follow-up appointments and referrals to support groups. The Tumor Registrar maintains liaison with other medical facilities and organizations to include the Armed Forces Institute of Pathology (AFIP), the DOD Central Registry, the Arizona State Cancer Registry, The American Cancer Society, and the Veterans Administration hospitals.

The Tumor Registrar attends Cancer Conferences (Tumor Boards) at the Sierra Vista Regional Health Center (SVRHC). The Tumor Registrar provides administrative support to the RWBAHC staff physicians who present cancer cases to the Tumor Board. The Tumor Registrar coordinates cases to be presented with staff at SVRHC and makes arrangements to have Radiology, pathology, and other reports available at the Tumor Boards. Tumor Registrar forwards copies of the minutes of the Tumor Board to the staff physicians who present cancer cases.