BUMED INSTRUCTION 6270.9

From: Chief, Bureau of Medicine and Surgery

Subj: ANALYSIS OF REMOVED COMBAT-RELATED METAL FRAGMENTS

Ref: (a) ASD(HA) Policy memo 07-029 of 18 Dec 07

1. **Purpose.** This policy operationalizes the requirement and responsibilities for the analysis of excised combat-related metal fragments per reference (a). Reference (a) is available at [https://health.mil/Reference-Center/Policies/2007/12/18/Policy-on-Analysis-of-Metal-Fragments-Removed-from-Department-of-Defense-Personnel](https://health.mil/Reference-Center/Policies/2007/12/18/Policy-on-Analysis-of-Metal-Fragments-Removed-from-Department-of-Defense-Personnel). This policy does not supersede the handling or submission requirements of specimens for forensic evidence.

2. **Cancellation.** BUMED memo of 20 June 2008, NAVMED Policy 08-016.

3. **Scope.** This policy applies to all ships and stations having Medical Department personnel.

4. **Background.** Studies at the Armed Forces Radiobiology Research Institute and the Army Public Health Center have shown high rates of metastatic sarcomas in animals with embedded fragments composed of a mixture of tungsten, nickel, and cobalt. Munitions containing a similar mixture are available to enemy combatants. Analysis of metal fragments removed during the treatment of combat wounds can lead to the discovery of the use of such munitions against our forces, and can also guide the subsequent care of individuals with retained metal fragments. Other metal fragments such as lead and uranium can also pose long-term health hazards. The intent of this policy is to ensure appropriate analysis and archiving of surgically excised combat-related metal fragments.

5. **Policy.** During primary debridement or subsequent care of a Service member, Veteran, or Department of Defense (DoD) civilian who has incurred combat-related injury, any and all metal fragments excised during the procedure must be collected and submitted for analysis and archiving. This policy is only applicable to those fragments that would normally be removed under current standards of surgical care; no separate or additional surgical procedure is indicated for the sole purpose of fragment removal for this analysis. All excised fragments should be segregated and labeled by anatomic location. Fragments that are obviously non-metallic in composition are not processed under this policy. Veterans with retained combat-related metal fragments should be encouraged to contact their local Department of Veterans Affairs (VA) environmental health coordinator, VA transition and care management program manager, or VA primary care team for evaluation, medical surveillance, and inclusion in the VA’s toxic embedded fragments registry.
6. **Responsibilities**

   a. **Fleet and Fleet Marine Force Surgeons.** Ensure fragments removed from DoD personnel are submitted for analysis as described herein, subject to the operational priorities of in-theater clinical combat care.

   b. **Commanders, Navy Medicine East and West.** Ensure subordinate medical activities are aware of and comply with this policy.

   c. **Commanding Officers and Officers in Charge of Medical Treatment Facilities (MTF) must:**

      (1) Ensure communication of this policy to all appropriate staff, including clinical or non-clinical case managers and recovery care coordinators.

      (2) Ensure patients and staff understand that all metal fragments are the property of the U.S. Government, and are not returned to the individual from whom the fragment was removed.

      (3) Facilitate collaboration with the respective TRICARE Regional Office or TRICARE Area Office, TRICARE contractor, and other relevant stakeholders for patients referred to a purchased sector care provider. Coordination should address the transfer of removed combat-related metal fragments from the purchased sector care provider to an appropriate Navy MTF for processing, as well as ensuring the results of the analysis are transmitted to the purchased sector care provider.

      (4) Ensure that local policies address the appropriate handling and submission of metal fragment specimens using current pathology submission methods and the Joint Pathology Center’s (JPC) instructions for specimen collection, handling, and shipment, per subparagraph 6c(6) of this instruction. Compliance should be confirmed through periodic medical record peer reviews per BUMEDINST 6010.30.

      (5) Ensure MTF laboratories designate an electronic health record order such as “Embedded Fragment Analysis” for providers to use. Details of the laboratory assay are contained in reference (a).

      (6) Ensure MTF laboratories submit specimens to the JPC using J-CS-FM-6465.03 JPC Pathology Consultation Request Form. That form, submission instructions, and contact information are available on the JPC Web site [http://www.jpc.capmed.mil](http://www.jpc.capmed.mil), under the “consultation” tab. The JPC will analyze the fragments for their chemical composition per reference (a), will communicate the results to the requesting MTF, will enter the results into the VA’s Embedded Fragment Registry database, and will archive the specimens. Fragment-associated tissues may also be sent to the JPC for histological evaluation using the JPC instructions.
(7) Ensure the results of the analysis from the JPC are provided to the requesting healthcare provider.

d. **Navy Surgical Community Specialty Leaders.** Disseminate this policy to all members of their surgical community and ensure that this standard of care is immediately adopted for their surgical specialty.

e. **Healthcare Providers in Charge of the Care of Patients with Removed Metal Fragments** must:

   (1) Ensure the fragments are collected and labeled as to anatomic location and submitted for analysis.

   (2) Ensure individuals with retained fragments are counseled to retain and submit any fragments spontaneously expelled. These fragments will be submitted during subsequent follow-up evaluations.

   (3) Ensure the results of fragment analysis are communicated to the patient. Information for clinicians and patients is available at [http://www.pdhealth.mil/topics/deployment-health/deployment-related-exposures/depleted-uranium-and-embedded-fragments/embedded-fragments-medical-management-program](http://www.pdhealth.mil/topics/deployment-health/deployment-related-exposures/depleted-uranium-and-embedded-fragments/embedded-fragments-medical-management-program). For assistance in interpreting the results and guidance on clinical follow-up, providers should contact their supporting occupational health clinic, the Navy and Marine Corps Public Health Center at (757) 953-0700, or the VA’s Toxic Embedded Fragment Surveillance Center at (800) 815-7533.

   (4) Provide a note in the electronic health record detailing actions if further metal fragments are discovered during subsequent treatment, debridement, or dressing change.

7. **Records Management.** Records created as a result of this instruction, regardless of media and format, must be managed per the Secretary of the Navy Manual 5210.1 of January 2012.

8. **Review and Effective Date.** Per OPNAVINST 5215.17A, the Bureau of Medicine and Surgery, Healthcare Operations (BUMED-M3) will review this instruction annually on the anniversary of its effective date to ensure applicability, currency, and consistency with Federal, DoD, Secretary of the Navy, and statutory authority using OPNAV 5215/40 Review of Instruction.

Releasability and distribution:
This instruction is cleared for public release and is available electronically only via the Navy Medicine Web site at: [http://www.med.navy.mil/directives/Pages/BUMEDInstructions.aspx](http://www.med.navy.mil/directives/Pages/BUMEDInstructions.aspx).