



DEPARTMENT OF THE NAVY
BUREAU OF MEDICINE AND SURGERY
7700 ARLINGTON BOULEVARD
FALLS CHURCH VA 22042

BUMEDINST 5450.271
BUMED-N1
22 Apr 2026

BUMED INSTRUCTION 5450.271

From: Chief, Bureau of Medicine and Surgery

Subj: MISSION, FUNCTIONS, AND TASKS OF THE NAVAL DOSIMETRY CENTER
BETHESDA

Ref: (a) BUMEDINST 5450.174B
(b) OPNAVINST 3120.32D
(c) OPNAVINST 6400.1D
(d) OPNAVINST 1000.16L
(e) NAVMCPUBHLTHCENINST 5450.1S (NOTAL)
(f) DoD Instruction 1010.16 of 15 June 2020
(g) NAVMCPUBHLTHCENINST 6220.2 (NOTAL)

Encl: (1) Functions and Tasks of Naval Dosimetry Center Bethesda

1. Purpose. To publish the mission, functions, and tasks of Naval Dosimetry Center Bethesda (NAVDOSCEN BETHESDA MD) under the mission established by references (a) through (g) and enclosure (1).

2. Cancellation. NAVMCPUBHLTHCENINST 5450.6.

3. Mission. NAVDOSCEN BETHESDA MD provides expert ionizing radiation dosimetry services and bio dosimetry support, ensuring the health, safety, and operational readiness of Navy and Marine Corps personnel worldwide, while advancing radiation health practices.

4. Command Hierarchy. NAVDOSCEN BETHESDA MD is a shore activity in an active operating status under an officer in charge.

a. Command

Officer in Charge
Naval Dosimetry Center
8901 Wisconsin Avenue, Building 416
Bethesda, Maryland 20889-5614

(SNDL: FH17) (UIC: 48539)
(PLA: NAVDOSCEN BETHESDA MD)

b. Echelon

- (1) Echelon 1: Chief of Naval Operations.
- (2) Echelon 2: Chief, Bureau of Medicine and Surgery (BUMED)
- (3) Echelon 3: Commander, Naval Medical Forces Atlantic
- (4) Echelon 4: Commander, Navy and Marine Corps Force Health Protection Command
- (5) Echelon 5: Officer in Charge, NAVDOSGEN BETHESDA MD

c. Immediate Superior in Command: Not-applicable.

d. Area Coordination:

- (1) Area Coordinator: Commanding Officer, Naval Support Activity Bethesda
- (2) Regional Coordinator: Commandant, Naval District Washington

e. Office of the Chief of Naval Operations (OPNAV) Resource Sponsor

(1) Director, Military Personnel Plans and Policy (OPNAV N13) and Expeditionary Health Branch (OPNAV N4L4)

(2) Activity-level aggregation of estimated manpower cost.

(a) Military Personnel Navy: \$2.09 million

(b) Civilian Personnel Navy: \$1.06 million

(c) Contractors: \$1.20 million

5. Supporting Relationships

a. Administrative Control relationship supporting: None.

b. Operational Control relationship supporting: None.

c. Additional Duty (To):

(1) Industrial Hygiene Officer (IHO) (1) to Headquarters, U.S. Marine Corps

(2) IHO (1) to Naval Sea Systems Command

(3) IHO (1) to Commander, Naval Safety Command Norfolk, Virginia

d. Additional Duty (From): None.

6. Obligations to External Entities

a. Executes memorandums of agreement and interservice support agreements to provide dosimetry support services to Department of War (DOW) and other Federal agencies.

b. Establishes and maintains scientific coordination with national and international organizations to further the enhancement of ionizing radiation protection programs as directed by the Surgeon General of the Navy, who also performs the duties of Chief, BUMED.

c. Collaborates with the Armed Forces Radiobiology Research Institute and other biodosimetry centers to establish and maintain a robust biodosimetry network.

7. Action. The Officer in Charge, NAVDOSGEN BETHESDA MD will ensure performance of the functions and tasks in enclosure (1) and forward recommended changes via the chain of command to Commander, Navy and Marine Corps Force Health Protection Command, per reference (a).

8. Records Management

a. Records created as a result of this instruction, regardless of format or media, must be maintained and dispositioned per the records disposition schedules located on the Department of the Navy (DON) Assistant for Administration, Directives and Records Management Division portal page at <https://portal.secnav.navy.mil/orgs/DUSNM/DONAA/DRM/Records-and-Information-Management/Approved%20Record%20Schedules/Forms/AllItems.aspx>.

b. For questions concerning the management of records related to this instruction or the records disposition schedules, please contact the local records manager or the OPNAV Records Management Program (DNS-16).

9. Review and Effective Date. Per OPNAVINST 5215.17A, Deputy Director, Manpower and Personnel (BUMED-N1B) will review this instruction annually around the anniversary of its issuance date to ensure applicability, currency, and consistency with Federal, DOW, Secretary of the Navy, and Navy policy and statutory authority using OPNAV 5215/40 Review of Instruction. This instruction will be in effect for 10 years, unless revised or cancelled in the interim, and will be reissued by the 10-year anniversary date if it is still required, unless it meets one of the exceptions in OPNAVINST 5215.17A, paragraph 9. Otherwise, if the instruction is no longer required, it will be processed for cancellation as soon as the need for cancellation is known following the guidance in OPNAV Manual 5215.1 of May 2016.

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10. Information Management Control. Reports required in paragraphs 5, 6, 7, and 8 of this instruction are exempt from reports control per Secretary of the Navy manual 5214.1 of December 2005, part IV, subparagraph 7k.

A handwritten signature in black ink, appearing to read "R. Freedman", with a long horizontal stroke extending to the right.

R. FREEDMAN
Acting

Releasability and distribution:

This instruction is cleared for public release and is available electronically only via the Navy Medicine Web site, <https://www.med.navy.mil/Directives/>

FUNCTIONS AND TASKS OF NAVAL DOSIMETRY CENTER BETHESDA

1. Serves as the Navy's ionizing radiation dosimetry center of excellence for the Navy's Radiation Health Protection Program in support of the Navy Medicine (NAVMED) P-5055, Radiation Health Protection Manual.
2. Executes the Navy's Tiered Dosimetry Program, including the control of distribution, receipt, processing, and comprehensive analysis for thermoluminescent dosimeters and other special purpose dosimeters.
3. Provides 24 hours a day and 7 days a week technical assistance, consultation services, and real-time radiation exposure assessments to requesting DOW commands, medical activities, and other government agencies on matters regarding radiation health and personnel dosimetry.
4. Maintains the Navy Automated Radiation Exposure Registry (NARER) as the official historical repository of ionizing radiation exposure data for personnel throughout DON and for other agencies with established agreements, or as directed by BUMED.
5. Analyzes NARER data to conduct trend analysis, risk assessments, and long-term health monitoring to identify potential risks and develop preventive strategies. Prepare and forward an annual NARER summary report to the BUMED Director of Undersea Medicine and Radiation Health.
6. Notifies appropriate authorities of irregularities in exposure reports or indications of an exposure control problem at an activity.
7. Develops, refines, and deploys advanced dose algorithms to maximize the accuracy and reliability of personnel dosimetry for the U.S. Navy and Marine Corps.
8. Conducts and supports state-of-the-art research and development of novel dosimetry technologies, radiation mitigation strategies, and the long-term health effects of ionizing radiation.
9. Provides bioassay and whole-body monitoring services for internal exposures to ionizing radiation for DON commands, as directed by BUMED.
10. Develops, maintains, and exercises robust contingency dosimetry plans for large-scale radiation emergencies, ensuring integration with military and civilian disaster response agencies. Maintain a deployable team of specialists for on-site support.
11. Integrates biodosimetry capabilities into contingency planning and response readiness. Maintain proficiency in sample collection, processing, and analysis, and facilitate rapid communication of results in support of radiation emergencies.

12. Serves as the authoritative source and subject matter expert on radiation measurement and protection within DOW.
13. Develops and delivers standardized, comprehensive radiation safety and specialized biodosimetry training for deploying personnel, medical staff, incident responders, and laboratory technicians.
14. Tracks and reports on participating command compliance with dosimeter receipt, utilization, and return procedures per applicable guidance.
15. Provides technical support and consultation for the DT-702/PD dosimetry program in the Naval Nuclear Propulsion Program.
16. Fosters academic and research partnerships with universities and other institutions to advance radiation health knowledge and provide professional development opportunities for NAVDOSCEN BETHESDA MD personnel.
17. Executes and maintains all mandated military and command administrative programs as required by higher authority.