

Chapter 22

PREVENTIVE MEDICINE AND OCCUPATIONAL HEALTH

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Section I. GENERAL

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22-1. Scope

(1) The fields of preventive medicine and occupational health extend into activities, under the cognizance of offices and commands of the Navy Department, where there are conditions which affect the health of the personnel of the Navy. Instructions are issued from time to time by BUMED, commanders in chief, and commanding officers concerning certain provisions of preventive medicine affecting administrative and military functions.

22-2. Responsibility

(1) The medical officer is responsible for establishing health standards and for recommending to the commanding officer the application of such measures

as may be necessary to maintain the health of the command.

22-3. Procedures

(1) The medical officer shall adhere to any procedures promulgated by a superior authority. When no instructions have been issued by proper superior authority, the medical officer shall propose for adoption by the commanding officer such measures as are necessary. Requests for technical advice, surveys, or investigations may be forwarded via appropriate channels to commands having environmental health officers, industrial hygienists, and preventive medicine technicians. Whenever conditions or circumstances arise which are unusual or require special attention, a special report shall be submitted to BUMED and the area environmental and preventive medicine unit.

Section II. ENVIRONMENTAL HEALTH AND INDUSTRIAL HYGIENE

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22-4. Environmental Health

(1) The cognizant medical authority shall be responsible for the following:

(a) Inspection, investigation, recommendation, and supervision of all matters pertaining to sanitation, including the sanitary aspects of food and food handling, water, sewage and waste disposal, housing, and other elements of the environment affecting health, and keeping the commanding officer informed in these matters.

(b) Indoctrination of the personnel of the ship, station, or activity in the latest advances in sanitary science and preventive medicine, including accident prevention and industrial health.

(c) Cooperation with civilian personnel and governmental agencies associated with health problems that may affect naval personnel at or in the vicinity of the command.

(d) Keeping records of inspection and reinspection, investigations, and recommendations.

(e) Preparing local reports.

22-5. Swimming Sites

(1) *Recommendations.*—The medical officer or Medical Department representative shall make appropriate recommendations to the commanding officer concerning the sanitary maintenance to be observed in and around swimming sites, and shall

further recommend that swimming be prohibited in contaminated waters. The Manual of Naval Preventive Medicine, Chapter 4, Swimming Pools and Bathing Places, NAVMED P-5010-4, establishes swimming site standards.

22-6. Industrial Hygiene

(1) The cognizant medical authority shall have the responsibility for planning and conducting an effective industrial health program which shall include the following:

(a) Study the occupational health problems of the ship, station, or activity.

(b) Conduct surveys of potential health hazards in specific activities and processes.

(c) Collect field and laboratory samples pertaining to occupational health exposures.

(d) Make laboratory analysis on samples taken in the field and on any material submitted with reference to causation of occupational disease.

(e) Prepare reports of findings, recommendations, and conclusions evaluating the hazards observed occupational health conditions.

(f) Maintain records and files of studies and examinations.

(2) Industrial hygiene services for operation units for the recognition, evaluation, and control of hazards in the work environment are available by contacting the cognizant preventive medicine unit.

Section III. SANITARY STANDARDS FOR LIVING SPACES

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22-7. Barracks

(1) The cognizant medical authority shall make routine inspections of barracks in order to maintain Navy standards of sanitation.

(2) The following are recommended minimum health/habitability criteria per enlisted person in all barracks:

- 72 ft.² (6.48 m²) of floor space per person.
- 500 ft.³ (15 m³) of room space per person.
- 6 ft. (180 cm) minimum distance between heads of sleeping persons.

When situations occur that may require deviation from the above criteria, advice should be requested from the area environmental and preventive medicine unit.

(3) The minimum proportions of plumbing fixtures to the number of personnel to be accommodated are as follows:

- Water closets . . . 1 for every 20 persons
- Urinals 1 fixture for every 25 men
- Lavatories 1 basin or wash sink for every 5 persons
- Showers 1 for every 25 persons

22-8. Berthing Spaces and Sanitary Facilities Afloat

(1) The medical officer or Medical Department representative shall make routine inspections of the

- Floor area per bed 100 ft.² (9 m²).
- Cubic space per bed 1,000 ft.³ (30 m³) to 2,000 ft.³ (60 m³).
- Height of ceiling 8'6" (255 cm) to 10'0" (300 cm).
- Bed spacing 8 ft. (240 cm) center to center.

- 1 lavatory for each toilet room in a bedroom.
- 1 lavatory for each 6 patients when private toilet rooms are not provided.
- 1 water closet for each toilet room in a bedroom.
- 1 water closet/urinal for each 6 patients when private toilet rooms are not provided for individual bedrooms.
- 1 shower for each private bedroom.
- 1 shower for each obstetrical bedroom.
- 1 shower or tub for each 7 patients for hospitals of 100 beds or more, exclusive of private and obstetrical bedrooms.
- 1 shower or tub for each 6 patients for hospitals of less than 100 beds, exclusive of private and obstetrical bedrooms.
- 1 service sink for each nursing unit.

22-10. Confinement Facilities Afloat

(1) *Inspections*.—A member of the medical department shall make a daily determination as to the

sanitary condition of berthing spaces, toilets, lavatories, and bathing facilities. Berthing spaces shall be clean, sufficiently ventilated, and well illuminated. Head-to-foot sleeping arrangements of occupants of adjacent beds are recommended to reduce the potential of air-borne disease transmission. Excellent standards of habitability contribute immeasurably to the health and well-being of the crew.

(2) Water closets, urinals, lavatories, and showers shall at all times be in functional condition. Shower curtains, bulkheads, and decks shall be free of mildew, odor, and soap accumulations. Sewage back-flow through deck drains constitutes an extremely unsanitary condition and shall be reported for immediate correction.

(3) Details of living space sanitation are contained in the Manual of Naval Preventive Medicine, Chapter 2, Sanitation of Living Spaces and Related Service Facilities, NAVMED P-5010-2, and OPNAVINST 9640 series, shipboard habitability program.

22-9. Hospital Nursing Units

(1) For Navy purposes, a nursing unit accommodating 30-40 patients is a size most adequate and economically administered. In tropical climates, and in hospitals caring for a large number of convalescent patients, the number of accommodations in the nursing unit may vary in accordance with environmental conditions.

(2) The following factors are considered basic:

health of the prisoners and the sanitary condition of the confinement facilities.

(2) *Afloat*.—Cell dimensions and sanitary facilities shall conform to standards set forth by the Naval Sea

Systems Command. Ventilation, heating, and illumination standards shall conform to General Specifications for Ships of the U.S. Navy. Detailed information concerning shipboard detention facilities should also be referred to the General Specification for Ships of the U.S. Navy, Naval Sea Systems Command.

(3) Ashore.—Sanitary standards stated in the Manual of Naval Preventive Medicine, NAVMED P-5010, shall be complied with. Detailed information concerning building and structural dimensions appear in Design Manual DM-37, Naval Facilities Engineering Command, and pertinent Department of Defense instructions.

Section IV. LIGHTING, HEATING, AND VENTILATION

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22-12. Lighting, Heating, and Ventilation

(1) The medical officer or Medical Department representative shall make recommendations to the commanding officer for proper lighting, heating, and ventilation of ships and barracks.

(2) Lighting intensities are prescribed by the OPNAVINST 9460 series, the Naval Sea Systems Command, and the Naval Facilities Engineering Command. Reference should be made to the appropriate manuals of the Naval Sea Systems Command, the

Naval Facilities Engineering Command, and OPNAVINST 9640 series.

(3) The purpose of heating and ventilating living spaces afloat and ashore is to provide a comfortable and safe atmosphere for the occupants. Ventilation ducts and vents are to be maintained free of dust, grime, and grease accumulations to ensure efficient and safe operation. Reference should be made to the appropriate manuals of the Naval Sea Systems Command, the Naval Facilities Engineering Command, and OPNAVINST 9640 series.

Section V. FOOD AND WATER SUPPLY

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22-13. Food

(1) The medical officer or Medical Department representative is charged with the following responsibilities:

(a) Make frequent inspections of the sanitary aspects of food storage, preparation, and service; examine menus to ascertain that a well-balanced diet is provided giving consideration to requirements specified in BUMED Instruction 10110.3 series; and make appropriate recommendations to the commanding officer.

(b) Ensure the continued maintenance of the standards of food sanitation as set forth in the Manual of Naval Preventive Medicine, Chapter 1, Food Sanitation, NAVMED P-5010-1.

(c) Ensure that all foods are prepared in clean surroundings by personnel free of communicable diseases and open lesions of the hands, face, and neck.

(d) Ensure that foods of a proteinaceous nature are not permitted to remain at room temperature for a period exceeding 3 hours, and are refrigerated at a temperature not exceeding 40° F (4° C).

(e) The Medical Department representative shall certify the acceptability of food and potable water in the event of nuclear, biological, or chemical (NBC) warfare. The Medical Department representative shall consult the Naval Supply Systems Com-

mand Manual (Subsistence chapter) for guidance in matters of recovery after NBC attack.

22-14. Water

(1) The Medical Department is charged with the responsibility for advising and making recommendations to ensure a safe supply of potable water. The Medical Department representative shall make special surveys of water supply systems, including all measures for purification, and make necessary recommendations for the correction of sanitary defects. In the event of an acute shortage of water, the commanding officer shall be advised relative to the rationing of water.

(2) In determining the potability of water, the Medical Department representative will be guided by appropriate instructions and the Manual of Naval Preventive Medicine, (Chapter 5, Water Supply Ashore, NAVMED P-5010-5, and Chapter 6, Water Supply Afloat, NAVMED P-5010-6).

(3) For purification of water in the field, reference should be made to field technical manuals and the Manual of Naval Preventive Medicine.

(4) Reference should be made to the Naval Sea Systems Command Manual for the proper operation of water supply plants aboard ships and to the Naval Facilities Engineering Command manuals and NAVFACINST 11330.14 series for drinking water at Navy shore activities.

Section VI. GARBAGE, REFUSE, AND SEWAGE DISPOSAL

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22-15. Garbage and Refuse Disposal

(1) The medical officer, or Medical Department representative, shall make the necessary inspections to ensure proper methods and adequate frequency of garbage and refuse disposal. Aboard ship, garbage and refuse may be dumped at sea, at the discretion of the commanding officer. Shipboard garbage grinders are not to be operated in harbor and river areas or within 12 nautical miles of the U.S. coast. Ashore, garbage and refuse may be disposed of in a manner prescribed by the Naval Facilities Engineering Command Manual, Refuse Disposal (MO-213), and the Manual of Naval Preventive Medicine, Chapter 8, Garbage and Refuse Disposal, NAVMED P-5010-8.

22-16. Sewage Disposal

(1) The medical officer, or Medical Department representative, shall make necessary inspections and recommendations to the commanding officer for the sanitary disposal of sewage and liquid industrial wastes. Navy policy on environmental pollution control is stated in OPNAVINST 6240.3 series. Reference shall be made to NAVMED P-5010-7, Manual of Naval Preventive Medicine, Chapter 7, Wastewater Treatment and Disposal Ashore and Afloat; Naval Facilities Engineering Command publications; Sewage and Industrial Waste Systems (NAV DOCKS MO-212); and Ship-to-Shore Hose Handling Operations Manual (NAVFAC MO-340).

Section VII. COMMUNICABLE DISEASE CONTROL

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22-17. General

(1) All Medical Department personnel are responsible for: (a) prevention of communicable disease when possible; (b) early detection and proper treatment when preventive measures are not successful; and (c) reporting as indicated by current directives. Medical Department personnel shall recommend to the commanding officer measures to prevent the spread of communicable disease. Such measures may include quarantine for the individual patient for the period of infectivity.

22-18. Support

(1) Naval environmental and preventive medicine units (NAVENPVNTMEDU) are tasked with providing consultation services to medical facilities within their areas of jurisdiction (see BUMEDINST 6200.3 series). NAVENPVNTMEDU's have personnel who are knowledgeable about communicable diseases within their area, their treatment, and the capability to investigate outbreaks of disease that are beyond the local medical department's capability.

22-19. Source Material

(1) All naval medical departments should have the basic library containing current editions as promulgated in BUMEDINST 6820.4 series. Beyond this basic library additional information may be found in:

- (a) BUMEDINST's 6200 series
- (b) BUMEDNOTE's 6200 series
- (c) Technical Information Manual for Medical Officers (NAVMED P-5052)

(2) NAVENPVNTMEDU's and BUMED (MED-314) are potential sources of information in the difficult or unusual circumstance not covered by the above sources.

(3) Fleet and FMF units deploying to infrequently visited countries should request information from the area NAVENPVNTMEDU and from BUMED Contingency Planning Division (MED 11). This division has its own sources of information as well as access to computerized data banks maintained by U.S. Army Medical Information and Intelligence Agency (USAMIIA). Information may be requested by message with the appropriate security classification.

22-20. Special Programs

(1) *Sexually Transmitted Diseases (STD).*—The control of STD is a command responsibility. Medical Department personnel are to be concerned with the medical aspects of STD and their control consistent with the basic policy as outlined in the SECNAV INST 6222.1 series.

(a) Education is a primary tool in prevention of STD. The General Military Training Program (OPNAVINST 1500.22 series) is designed to provide all hands with a basic level of knowledge concerning STD and their consequences. Medical Department personnel shall assist in this program when requested. In addition they shall provide special instruction to those persons who have been treated for STD.

(b) Diagnosis, treatment, and administrative procedures basic information will be found in NAVMED P-5052-11A, "Treatment and Management of Venereal Disease." The most recent official changes in policy, therapy, etc., will be found in SECNAV INST's, BUMEDINST's, and BUMEDNOTE's in the 6222 series.

(2) *Tuberculosis, Hepatitis, and Malaria.*—These illnesses are the subject of individual BUMEDINST's because of their potential for prolonged morbidity, communicability, and impact on readiness of the Operating Forces. The instructions deal not only with diagnosis and treatment, but also enumerate specific procedures for identifying infected individuals, prophylaxis, and reporting.

(3) *Other Programs.*—Additional programs of situational significance or of interest to special categories of personnel may be the subject of individual correspondence, messages, or BUMED notices and instructions; i.e., annual BUMEDNOTE on the influenza program, guidance regarding local situational immunization programs for rubella/rubeola, immunizations in recruit training, etc.

22-21. Reports

(1) *General.*—Medical Department personnel are responsible for the timely preparation and submission of routine reports and notices concerning the presence of communicable disease and other matters in the field of preventive medicine. General reporting requirements are to be found in chapter 23 of this

manual in addition to requirements noted in BUMEDINST/NOTICE's dealing with specific diseases.

(2) *Disease Alert Reports.*—Certain communicable diseases of military significance may require expeditious reporting. These diseases are enumerated and the manner and format of reporting described in BUMEDINST 6220.3 series.

(3) *Cooperation with Other Agencies.*—Medical Department personnel shall cooperate with Federal, State, and local health agencies and civil authorities in the prevention, control, and reporting of communicable infections and/or contagious diseases. All per-

sons discharged from the service with an infectious disease which is considered to be a potential hazard to the health of the population shall be reported. Such reports shall be made to the health department of the State which is the prospective residence of the individual being discharged. The report, in letter form with duplicate attached, shall include only the following information: name, prospective place of residence (address), diagnosis, date of discharge, and place of discharge. The report shall emphasize that the information given is confidential.

Note: There are no articles 22-22 thru 22-29.

Section VIII. IMMUNIZATION

Regulations	Article 22-30
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22-30. Regulations

(1) Immunization programs for Department of the Navy personnel, their dependents, and eligible

civilians shall be administered in accordance with BUMED Instruction 6230 series and the current edition of the publication NAVMED P-5052-15.

Section IX. INSECT, PEST, AND RODENT CONTROL

	Article
Control of Disease Vectors and Pests Detrimental to Health, Morale, and Habitability	22-31

22-31. Control of Disease Vectors and Pests Detrimental to Health, Morale, and Habitability

(1) The medical officer in concert with the public works officer shall formulate plans and methods for the control of disease vectors and pests detrimental to health, morale, and habitability of shore activities and shall make recommendations to the commanding officer regarding steps to be taken to this end. The number of officers trained in insect and pest control (entomologists) will generally be small; therefore, the services of such officers must be used on an area-wide basis to give adequate protection to all naval facilities.

(2) The medical department will be responsible for the following:

(a) Inspections and surveys to determine the species, source, location, and density of vectors.

(b) Recommendations relating to sanitation standards and practices affecting the presence and abundance of vectors and utilization of vector control methods.

(c) Evaluation of the effectiveness of vector control measures.

(d) Inspections and recommendations to ensure that pesticides are used safely in accordance with current directives.

(e) Provision of information on all appropriate personal protective measures against vectors.

(f) Coordination with civilian and other Government agencies having vector control problems that may affect naval personnel at or in the vicinity of a command.

(g) Compliance with all appropriate public health quarantine measures.

(3) The medical department may be additionally charged by the commanding officer with the responsibility for all operational phases of the vector control programs as follows:

(a) In the event of a vector-borne disease outbreak.

(b) In the absence of a public works department, e.g., at certain shore installations, on board ships, and with troops in the field.

(c) In the control of vectors actually infesting humans (e.g., lice, mites).

(d) In disasters.

Note: There is no article 22-32.

Section X. QUARANTINE PROCEDURES

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22-33. General

(1) Quarantine regulations are intended to prevent the introduction and dissemination, domestically or elsewhere, of diseases of humans, plants, and animals, prohibited or illegally taken wildlife, arthropod vectors, and pests of health and agricultural importance. Basic regulations and detailed instructions concerning such procedures are found in SECNAVINST 6210.2 series. Additional instructions are published from time to time and may be found in current official naval publications.

22-34. Responsibilities of Medical Department

(1) The duty of personnel of the Medical Department, ashore or afloat, is to be well informed concerning current naval quarantine regulations and instructions, to advise and make timely recommendations to commanding officers to ensure compliance with these regulations, and to recommend the promulgation of additional or special quarantine measures when necessary.

(2) As regulations differ from port to port, medical officers serving aboard naval vessels shall endeavor to determine in advance the quarantine regulations of each port in which entry is contemplated in order to ensure full compliance with those regulations and to minimize delay.

(3) Staff medical officers of each command of the naval establishment having quarantine responsibilities shall effect and maintain close liaison with the local quarantine officer of responsible agencies.

22-35. Quarantine Authority and Responsibility

(1) Quarantine authority and responsibility is vested in the Department of Health and Human Services; Agriculture; Treasury; Interior; and Commerce. The agencies specifically tasked with quarantine responsibilities include the Plant Protection and Quarantine Programs and Veterinary Services of the Animal and Plant Health Inspection Service, Department of Agriculture; Division of Law Enforcement, Bureau of Sport Fisheries and Wildlife, Department of Interior; the Customs Service of the Treasury

Department; and the Public Health Service of the Department of Health and Human Services.

(2) The quarantine requirements of United States territories and foreign countries must be complied with in all instances. Commanding officers concerned should maintain liaison with local national quarantine authorities in order that they may cooperate in their enforcement efforts.

(3) In naval establishments outside the United States, its territories, and possessions, where neither Federal or other civil authority has quarantine jurisdiction, or does not exercise such jurisdiction, the full responsibility for quarantine conveys to the naval area/base commander.

22-36. Quarantinable and Communicable Diseases

(1) *Diseases Subject to Quarantine*.—By international agreement, only four diseases are classified as quarantinable:

- (a) Cholera (incubation period 5 days).
- (b) Plague (incubation period 6 days).
- (c) Small pox (incubation period 14 days).
- (d) Yellow fever (incubation period 6 days).

(2) *Communicable Diseases*.—While emphasis is placed on measures to prevent the dissemination of "quarantinable" diseases, the Medical Department is charged equally with the responsibility of recommending measures to prevent the dissemination of communicable diseases other than those classified as quarantinable both within and among naval establishments and civilian communities.

22-37. Control of Rodent and Insect Infestation Aboard Ships

(1) *Certificates of Deratization or Deratization Exemption*.—

(a) By international convention a "certificate of deratization," or a "deratization exemption certificate" is required of vessels entering most foreign ports, if detention for fumigation is to be avoided. A certificate to be valid must be issued by the U.S. Public Health Service.

(b) Medical officers of vessels proceeding to or returning from foreign ports must apply (as

required by international convention) for a certificate of deratization or deratization exemption. These certificates may be obtained by requesting that a rodent inspection be made by a U.S. Public Health Service representative. If on inspection a rodent problem is found to be present, deratization measures will be required. After deratization, a certificate of deratization will be issued. If no rodent problem is found to be present, a certificate of deratization exemption will be issued. Either certificate is valid for 6 months. Failure to possess such a certificate may result in a quarantine and a rodent inspection.

(c) The carrying of certificates of deratization or deratization exemption is not required of naval vessels under circumstances other than those stated in articles 22-37(1) (a) and (b) because of the high state of ratproofing and rat control on board most naval vessels. Both a quarantine and a rodent inspection are required, however, upon first entering a United States port, if the vessel has made contact with a plague port within the previous 60 days.

(d) While periodic rat inspections are not required of United States naval vessels by the U.S. Public Health Service, it is appropriate and highly desirable to request inspections and recommendations of the U.S. Public Health Service or naval rodent control officers when these are available, because of their expert knowledge of the habits and methods for control of rats aboard ship. The medical officer shall recommend that the commanding officer make such requests whenever the presence of rats is suspected. For supply ships, transports, and repair ships, which

are most frequently seriously infested, a routine preventive inspection every 6 months by a trained rodent control officer of the Navy or U.S. Public Health Service is indicated. Naval and/or U.S. Public Health Service rodent control officers are available in all major ports of the United States, its territories, and possessions, and can be reached through the port director.

(e) Reference should be made to SECNAV INST 6210.2 series and the 6250 series of instructions from the Bureau of Medicine and Surgery for detailed information on avoidance or control of rat infestations, and procedures for obtaining a "certificate of deratization" or "deratization exemption certificate."

22-38. Disinsectization

(1) Regulations governing disinsection of vessels and aircraft are promulgated by the Public Health Service of the Department of Health and Human Services. Disinsectization procedures are outlined in current BUMED directives in the 6250 series.

22-39. Transfer of Pathogenic Cultures and Organisms

(1) Current regulations governing the importation and transfer of etiological agents of disease are found in the SECNAVINST 6210.2 series and BUMEDINST 6210.3 series.

(2) Shipments by United States mail must comply with United States Post Office regulations.

Section XI. FIELD SANITATION

	<i>Article</i>
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22-40. General

(1) The responsibilities of medical officers with regard to sanitation, when serving with personnel in the field, are essentially the same as those serving with personnel housed in permanent shore establishments. They shall maintain an inspection service sufficient to ensure the sanitary operation of messing facilities, water purification equipment, waste disposal facilities, and other appliances in order to protect the health of all personnel. Sanitary appliances used in the field are simpler and easier to construct than those used in permanent installations, but more attention is required to maintain them in satisfactory condition.

22-41. Preparation for Field Service

(1) The medical officer shall become familiar with all health and sanitary data available on the area to be occupied, formulate a plan, prepare the necessary sanitary orders for the practical solution of problems likely to be encountered, and present them to the commanding officer for approval and execution. The plan shall provide for:

- (a) The indoctrination of all personnel in personal hygiene, sanitation, and the special protective measures to be used.
- (b) The assignment of an adequate complement of nonmedical personnel (approximately 2

percent of the command) to sanitary duties such as maintenance and care of latrines and urinals, fly control, mosquito control, rodent control, and garbage and waste disposal. In combat areas, additional personnel must be assigned for the handling and burial of the dead.

(c) The thorough indoctrination of the non-medical personnel in their sanitary duties for efficient performance with a minimum of supervision.

(d) The assignment and enforcement of priorities for the acquisition of materials and supplies and the early construction of sanitary appliances in the field.

(e) The selection and physical examination of food handlers, and their indoctrination in personal hygiene, sanitation in the preparation of food, and the care of utensils and mess gear.

(f) The inspection and approval by the medical officer of galloys before the galleys are placed in operation.

(2) The planning and the indoctrination and training of personnel in the training camp or staging area in order to provide an efficient, well-trained sanitary organization upon landing.

(3) The required immunizations shall be completed in ample time to provide protection upon arrival.

(4) The medical officer shall refer to the Manual of Naval Preventive Medicine, NAVMED P-5010, for preventive medicine practices in the field.

Section XII. RADIATION HEALTH

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22-42. Scope

(1) Radiation health programs comprise those procedures designed to protect and maintain the health of persons in the Naval Establishment whose duties involve exposure to medical or nonmedical sources of ionizing radiation.

22-43. Delineation of Responsibility

(1) *Radiation health programs* are a medical responsibility. At BUMED command activities, the responsibility is assigned to the commanding officer, who may delegate program-operation responsibility. At ships and stations under the command of other offices, responsibility for the radiation health program is assigned to the head of the medical department of the command.

(2) *Radiological safety and control programs* are nonmedical responsibilities, and include all non-health-related procedures and techniques utilized to control access to and handling of all sources of ionizing radiation—natural, induced, or contaminated. Medical Department personnel normally shall not be assigned duties and responsibilities in these programs, except in BUMED command activities.

22-44. Guidance and Procedures

(1) Basic regulations and detailed instructions regarding exposure to ionizing radiation are promulgated by the Environmental Protection Agency, the U.S. Nuclear Regulatory Commission, the various bureaus and offices, commanders in chief, type and force commanders, and commanding officers. The medical officer shall adhere to these issuances and to the procedures outlined in article 22-3 as they apply to the radiation health program.

22-45. Duties of Medical Department Personnel

(1) The duties of Medical Department personnel of any activity involved in the construction, opera-

tion, or repair of nuclear-powered vessels or research reactors, or in the maintenance of nuclear weapons, or in the use of ionizing radiation in nondestructive testing, are to:

(a) Be well informed on current regulations and instructions regarding exposure to ionizing radiation, advise and make timely recommendations to commanding officers to ensure compliance therewith, and recommend the promulgation of additional or special instructions when necessary.

(b) Determine, in accordance with current directives, the physical fitness of individuals employed in or assigned to areas where occupational exposure to ionizing radiation can occur.

(c) Conduct, in accordance with current directives, periodic medical examinations of individuals exposed to radiological hazards.

(d) Conduct a personnel dosimetry program and advise responsible officers concerning the radiation status of individuals under their supervision.

(e) Instruct nonmedical personnel concerning the effects of ionizing radiation.

(f) Determine the adequacy of radiological control measures in effect and make recommendations for improvements when necessary.

(g) Treat patients injured from and/or contaminated with radioactive material.

22-46. Radiation Health Officers

(1) On board certain ships and at certain stations, the medical officer is provided specially trained radiation health protection officers to aid in executing the radiation health program. They may be Medical or Medical Service Corps officers, or civil service employees. In such situations, these officers shall be assigned to, and carry out their duties within, the medical department of the command. They shall at all times keep the medical officer informed concerning the results of their findings and observations.

Section XIII. OCCUPATIONAL HEALTH

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22-47. Occupational Health Program

(1) SECNAVINST 5100.10 series directs the establishment within the Navy Department of "... comprehensive, aggressive, and effective occupational safety and health programs." OPNAVINST 5100.8 series and 5100.23 series established the Navy Occupational Health Program, organizational responsibilities, and basic policies. Navy Medical Department responsibilities embrace support services to Navy and Marine Corps activities and to Navy and Marine Corps personnel, both uniformed and civilian.

(2) Component supportive health services authorized are summarized in Office of Management and Budget (OMB) Circular Letter A-72 and include:

- (a) Emergency treatment of illness or injury occurring while at work.
- (b) Referral of an individual to a personal physician or other health care source.
- (c) Health guidance and counseling.
- (d) Periodic testing for the early detection of chronic disease and disorders.
- (e) Immunization programs.
- (f) Periodic medical examination program.
- (g) Treatments requested by a physician.
- (h) Assistance in detecting and evaluating worksite environment health hazards.

(3) Federal Personnel Manual 792 provides the basic guidance for the scope and components of an occupational health service.

(4) Civilian personnel who become ill or are injured in the course of their work are considered beneficiaries of the Department of Labor, Office of Workers' Compensation Programs (OWCP). The treatment and administrative management of such civilian personnel are governed by the Federal Personnel Manual, Chapter 810.

(5) Military personnel will be managed in accordance with current Department of the Navy directives.

22-48. Occupational Health Examinations

(1) Personnel physical evaluations are performed for administrative reasons. Physical abnormalities, or possible deviations, are reported to the individual and referral to health care source may be made. Recommended dispositions or actions are forwarded to the

requesting office/officer. The administrative purposes for which physical evaluations are performed include:

(a) *Preplacement/Preemployment Medical Examination.*—All prospective employees and personnel under consideration for reassignment will be evaluated and recommendations will be submitted in accordance with Office of Personnel Management (formerly Civil Service) Handbook X-118/X-118C, pertinent articles in this manual, and other current Office of Personnel Management and military directives. Evaluations are performed to the extent required to ascertain an individual's ability to perform the required duties in the specifically identified work environments. The results of such evaluations are reported as "qualified" or "not qualified" to the personnel officer requesting the evaluations. Individuals found not qualified for a particular assignment are informed of the specific disqualifying medical findings. Referral to a physician for further evaluation or treatment is made when indicated. Similar procedures for military uniformed personnel are conducted in accordance with current Navy directives.

(b) *Fitness for Duty Evaluations.*—The authority to order a "fitness for duty" physical evaluation, contained in Federal Personnel Manual, Supplement 752-1, presumes the existence of a deficit in employee on-the-job performance which has been recognized by the person's immediate supervisor. In addition to the line supervisor, this type of evaluation may be requested by the member. In this instance, the presence of a condition which may be detrimental to health or performance may be the basis and authority for the request. Guidance for the requesting procedure is contained in Federal Personnel Manual, Supplement 831-1. The request for such evaluation is forwarded to the appropriate department personnel officer, who will make a formal, written request to the medical activity. Fitness for duty evaluation must always be considered as the possible initial step to a command initiated disability retirement/separation procedure.

(c) *Disability Retirement Physical Examinations.*—Disability retirement examinations are a service provided to the servicing civilian personnel officer. The command's interest lies in the imminent loss of talented personnel. The desire to assure security and

financial well-being of the retiring individual and prompt processing to enable replacement procedures to commence are the motivating factors of the examinations. The procedure for conducting and processing disability retirement physical examinations is contained in Federal Personnel Manual, Supplement 831-1.

(d) *Competence for Duty (Substance Abuse).*—

(1) When requested, competence for duty evaluations and disposition of Navy and Marine Corps personnel, both civilian and uniformed, will be performed in accordance with BUMEDINST 6120.20 series.

(2) FPM letters 792-4 and 792-7 require the acute alcohol abuse incident to be considered as a possible alcoholism situation.

(3) A twofold disposition of the person with a probable/possible acute alcohol abuse condition is indicated:

(a) Referral to the appropriate personnel assistance office for interview and counseling, and

(b) The individual who is unable to perform the normally assigned tasks is prohibited from commencing/returning to work that work period. Arrangements must be made to transport the person to quarters or to medical care, as indicated by the condition and required needs of the person.

(4) Alcoholism and problem drinkers are recognized as a treatable health problem. Fitness for duty evaluations are required on the basis of observed unacceptable performance.

22-49. Personnel Occupational Health Surveillance

(1) SECNAVINST 5100.10 series and OMB Circular Letter A-72 authorize two categories of personnel health surveillance:

(a) Periodic personnel health status review.

(b) Periodic surveillance to confirm or detect early presymptomatic exposures to health hazards, materials, and environments in the worksite.

(2) While both categories are authorized to be performed in an occupational health unit, evaluations in the second category are directed. There are constantly increasing numbers of substances being identified which are considered hazardous. An increasing number of studies of a greater degree of complexity are being required to assure a safe working environment directed by the OSHA Act of 1970 (P.L. 91-596) and Executive Order 11807. These references and various BUMED instructions and notices identify the subcomponents which comprise the medical surveillance program.

(3) Those services not directly available at a branch clinic are made available through the facilities of the cognizant naval regional medical center's preventive medicine service. Requests for these services will be made through the branch clinic. Operating

Forces may obtain support from the area Navy environmental and preventive medicine unit.

22-50. Occupational Health Surveys and Investigations

(1) Support in the form of surveys and investigations is provided, consisting of:

(a) Surveys and investigations to identify, evaluate, and provide recommendations for the control of occupational factors or stresses due to toxic chemicals, harmful physical and biological agents, or ergonomic factors which can affect the health, well-being, and efficiency of personnel.

(b) Surveillance over potentially health-critical work processes and procedures to protect the health of exposed personnel.

(c) Investigation of job-related illnesses and injuries, in cooperation with occupational health and safety personnel, to evaluate occupational health conditions and recommend controls or measures necessary to prevent recurrences.

(d) Provision of industrial hygiene laboratory services as appropriate (e.g., contract, in-house, intra/interservice agreement) for the chemical or physical analysis of air and water contaminants, potentially toxic proprietary products, and biologic fluids to evaluate occupational exposures in support of surveys and health evaluations.

(e) Review of plans for new facilities and processes, or changes to existing facilities and processes, to ensure that provisions have been made in engineering designs for controls to safeguard the health of personnel.

(f) Provide consultation on personal protective equipment programs and serve as primary advisor for the respiratory protection program.

(g) Consultation in matters concerning occupational pollution control which may affect employees or the surrounding community.

(h) Liaison with other Government and non-Government agencies concerning occupational health matters.

22-51. Occupational Optometry

(1) Occupational optometry services are provided to civilian employees and industrially employed military personnel. The services provided include support for the respective command's sight conservation program. The services provided to the commands include:

(a) Field surveys to determine occupational standards, vision requirements, and allowable vision handicaps.

(b) Vision screening tests conducted as part of a preemployment physical examination and repeated periodically as a part of the activity's occupational health surveillance. Vision certification and recertification procedures conducted to comply with

pertinent instructions for welding and brazing and nondestructive testing inspection personnel.

(c) Clinical evaluation and refractive procedures to determine industrial prescriptions for safety eyewear.

(d) Verification, dispensing, and repair procedures for industrial prescription safety eyewear.

(e) Training of personnel to dispense plano safety eyewear.

(f) Ocular surveillance procedures for radiation health, laser operating, and microwave exposure programs.

(g) Consultative and advisory services to management on occupational vision care and maintenance.

(h) The funding and procurement of industrial prescription safety eyewear as required by the sight conservation program is the responsibility and function of the supported command.

22-52. Occupational Radiation Exposure

(1) Nonionizing radiation exposure may occur in work areas in the form of microwave (radar), ultraviolet, infra-red and intense visible and invisible spectra light type emissions (laser) either as a direct work process or as a concurrent effect of another process. Medical support is provided as components of preplacement, periodic and termination evaluations, industrial hygiene area evaluations, and prescription of eye protection measures as indicated.

(2) Ionizing radiation exposures may occur during the occupational utilization of radiation as a tool (such as in industrial X-ray and radionuclide radiography and radac calibration), the management of certain radioluminescent material, and during work supporting the Navy Nuclear Propulsion Program.

(a) The administrative procedures, the physical monitoring, documentation of exposure doses, record maintenance, training, and personnel certification of all ionizing radiation control aspects are the responsibilities of the branch clinics, except when such duties are retained by the supported commands.

(b) Medical support is provided in accordance with BUMEDINST's 6260.18 and 5450.116 series and NAVMED P-5055, Radiation Health Protection Manual. Industrial hygiene branch facilities and resources of the cognizant NAVREGMEDCEN/NAV REGMEDCLINIC are available for radiation health consultation and assistance upon request.

22-53. Other Occupational Health Services

(1) *Emergency Care.*—Emergency or first-aid treatment services are provided, to all persons who become ill or sustain an injury while at work or while on a Government reservation, for humanitarian reasons. In the absence of adequate resources, transportation to community medical facilities will be provided.

(2) *Referral to Physician.*—When screening or other tests reveal abnormal conditions not associated with the work environment, the findings are explained to the person with referral to a private physician or appropriate medical facility. Military personnel will be referred for clinical consultation at a regional medical facility in accordance with local procedures.

(3) *Health Guidance and Counseling.*—As presented above, and within the clinic capability, occupational health guidance and counseling are provided by all medical activities.

(4) *Immunization Programs.*—A general immunization program is provided in support of employees required to travel to other geographic areas and for other indicated programs. Immunization programs for military personnel are directed in BUMEDINST 6230.1 series.

(5) *Treatments requested by a Physician.*—Within the capabilities of the medical facility personnel, medical treatment ordered in writing by a civilian physician may be provided as a convenience to personnel and as a means of assisting in the reduction of lost productive time. Medications, sera, and other treatment materials are normally provided by the prescribing physician to the patient concerned.

(6) *Ambulance Services.*—

(a) Transportation, as required for the care of military active duty personnel, is provided by the naval regional medical center.

(b) Naval regional medical center branch clinics will provide transportation for the transient personnel, visitors, and other civilians as humane action dictates.

(c) Transportation of civilian employees who require medical care is addressed and directed by OMB Circular Letter A-72. The use of civilian commercial patient transportation facilities is authorized. Payment to the carrier will be made directly by the Department of Labor (OWCP) or to the patient as reimbursement of costs incurred. Nonemergency transportation of civilian personnel to a medical treatment facility or to an employee's home is not a medical responsibility. Commands may assume the responsibility to transport such employees to a local community medical treatment facility and to return the employee to the worksite after such treatment.

(7) *Education and Training.*—

(a) An established need for specialized training of personnel involved in potential health hazardous evaluation is recognized. Medical activities will provide education and training consultative support to the extent permitted by existing resources.

(b) Participation in education and training sessions will be conducted on arrangement with and through the branch clinic or Navy environmental and preventive medicine unit providing occupational health services.