



COMDTINST 6220.4
22 AUG 2014

COMMANDANT INSTRUCTION 6220.4

Subj: INFECTION PREVENTION AND CONTROL PROGRAM FOR COAST GUARD
HEALTH CARE FACILITIES AND WORKERS

- Ref: (a) Coast Guard Medical Manual, COMDTINST M6000.1 (series)
(b) Safety and Environmental Health Manual, COMDTINST M5100.47 (series)
(c) Immunizations and Chemoprophylaxis, COMDTINST M6230.4 (series)
(d) Human Immunodeficiency Virus (HIV) Program, COMDTINST M6230.9 (series)

1. PURPOSE. This Instruction describes policies for preventing and controlling health care-associated infections (HAIs) in patients, visitors, volunteers, and health care workers (HCW) within any health care setting in the Coast Guard. This Instruction also provides guidance and information on the prevention and control of diseases caused by infectious diseases such as tuberculosis and bloodborne pathogens (BBP) in health care facilities.
2. ACTION. Area and district commanders, commanders of service centers and FORCECOM, commanding officers of Headquarters units, Superintendent of the Academy, assistant commandants for directorates, Chief Counsel, and special staff offices at Headquarters shall ensure compliance with this Instruction's contents. Internet release is authorized.
3. DIRECTIVES AFFECTED. Coast Guard Medical Manual, COMDTINST M6000.1 (series) Ch. 13 Section J, Infection Control Program (Exposure Control Plan) and Prevention of Bloodborne Pathogen Transmission, COMDTINST M6220.8 (series) are cancelled.
4. DISCLAIMER. This guidance is not a substitute for applicable legal requirements, nor is it itself a rule. It is intended to provide operational guidance for Coast Guard personnel and is not intended to nor does it impose legally-binding requirements on any party outside the Coast Guard.
5. ENVIRONMENTAL ASPECT AND IMPACT CONSIDERATIONS.
 - a. The development of this Instruction and the general policies contained within it have been thoroughly reviewed by the originating office in conjunction with the Office of Environmental Management, and are categorically excluded (CE) under current USCG CE # 33 from further environmental analysis, in accordance with Section 2.B.2. and Figure 2-1 of the National Environmental Policy Act Implementing Procedures and

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NON-STANDARD DISTRIBUTION:

Policy for Considering Environmental Impacts, COMDTINST M16475.1 (series). Because this Instruction implements without substantive change guidance on, and provisions for, compliance with applicable environmental mandates, Coast Guard categorical exclusion #33 is appropriate.

- b. This Instruction will not have any of the following: significant cumulative impacts on the human environment; substantial controversy or substantial change to existing environmental conditions; or inconsistencies with any Federal, State, or local laws or administrative determinations relating to the environment. All future specific actions resulting from the general policies in this Instruction must be individually evaluated for compliance with the National Environmental Policy Act (NEPA), Council on Environmental Policy NEPA regulations at 40 CFR Parts 1500-1508, DHS and Coast Guard NEPA policy, and compliance with all other environmental mandates.
6. **DISTRIBUTION.** No paper distribution will be made of this Instruction. An electronic version will be located on the following Commandant (CG-612) web sites. Internet: <http://www.uscg.mil/directives/>, and CGPortal: <https://cgportal2.uscg.mil/library/directives/SitePages/Home.aspx>.
 7. **RECORDS MANAGEMENT CONSIDERATIONS.** This instruction has been evaluated for potential records management impacts. The development of this instruction has been thoroughly reviewed during the directives clearance process, and it has been determined there are no further records scheduling requirements, in accordance with Federal records Act U.S.C. 3101 et seq., National Archives and Records Administration (NARA) requirements, and the Information and Life-cycle Management Manual, COMDTINST M5212.12 (series).
 8. **RESPONSIBILITIES.**
 - a. **Commandant (CG-11).** Provides technical expertise to the Commandant for the prevention and control of infectious diseases and other emerging health threats.
 - b. **Commandant (CG-112).** Develops policy and delegates broad oversight responsibility for the Infection Prevention and Control Programs to the Health, Safety and Work-Life Service Center (HSWL SC) and to HSWL regional practice sites (hereinafter referred to as clinics).
 - c. **Health, Safety, and Work-Life Service Center (HSWL SC).** Ensures Coast Guard clinics are implementing this Instruction in conjunction with guidelines from the Centers for Disease Control and Prevention (CDC), applicable standards and requirements from the external accreditation organization, as well as guidance from other professional organizations. Specifically:
 - (1) Identifies the scope of the program relevant to the mission of the Coast Guard clinic.
 - (2) Establishes a HSWL SC tactics, techniques, and procedures (TTP) publication for infection prevention and control procedures.
 - (3) Establishes a HSWL SC working group to oversee effective infection prevention and control program throughout the enterprise.
 - (4) Ensures implementation of a hand hygiene protocol for the Coast Guard clinic in accordance with CDC and the World Health Organization (WHO) guidelines on hand hygiene.

- (5) Identifies the procedure for investigating any exposure to potentially contaminated equipment or supplies, outbreaks, or a sudden influx of infectious patients.
- (6) Identifies and reduces risks of common cause and special cause health care-associated infections in patients and HCWs at the patient care level.
- (7) Ensures that incidents of occupational exposure to blood and other potentially infectious materials (OPIM) are managed and documented in accordance with the Occupational Safety and Health Administration (OSHA) standards and CDC guidelines specified in this instruction.
- (8) Ensures all HCWs receive training in the area of infection prevention and control.
- (9) Ensures all HCWs and volunteers receive work-area specific continuing education on infection control annually.
- (10) Establishes or uses current facility-wide centralized record keeping system to document compliance with the regulated training requirements.
- (11) Defines policy and procedures for the prevention and control of infection that is consistent throughout the organization, linen, housekeeping/environmental cleaning, medical equipment, supplies, procedures, devices, use of standard precautions, personal protective equipment (PPE), and infectious waste disposal.
- (12) At the request of the responsible respirator program manager, assist with fit-testing individuals required to wear respirators.

9. HEALTH SERVICE ADMINISTRATORS (HSA).

a. Ensure implementation of the HSWL SC TTP publication.

- (1) Ensure all vaccinations (and exemptions) for civilian and military personnel are documented in the appropriate medical record.
- (2) Assign a staff member with responsibility as the clinic infection prevention and control officer. Responsibilities will include:
 - (a) Ensure clinic HCWs understand and comply with the basic principles and practices of infection control (e.g., hand hygiene, aseptic technique, standard precautions, isolation, and personal protective attire/equipment).
 - (b) Perform regular risk assessments.
 - (c) Monitor HCWs to ensure they know and comply with all infection control policies and practices.
 - (d) Report occupational exposures and injuries as specified in reference (a), Chapter 12.
- (3) Ensure staff members with infectious illnesses are evaluated by a health care provider (HCP) and duty restrictions are enforced in accordance with current CDC Infection Control Guidelines.
- (4) Ensure prompt medical evaluation, treatment, and report of suspected/actual health care-associated infections or a communicable disease per the mechanism

identified by the clinic's standard operating procedures (SOP). Document reportable medical events in accordance with reference (a), Chapter 7.

- b. Commanding Officers and Officers in Charge. In accordance with reference (b), commanding officers shall ensure HCW receive the annual bloodborne pathogen training and receive respiratory fit testing as delineated by appropriate guidance.

10. GENERAL EMPLOYEE HEALTH PROGRAM ELEMENTS.

- a. Immunizations. All required immunizations for HCW (military and civilian) are listed in reference (c).
- b. HIV Testing. HIV testing is required periodically for HCWs (military) in accordance with reference (d). All civilian, contract, and volunteer personnel must produce documentation of a negative HIV test.
- c. Tuberculosis (TB) Screening. HCWs (military) must have documentation of tuberculosis skin test (TST) or an approved blood assay for TB screening in accordance with reference (a). All civilian, contract, and volunteer HCWs must produce documentation of an appropriate TB test protocol (either the two step tuberculin skin test or approved blood assay for TB screening) prior to employment with the Coast Guard. Persons without the documentation should have either the two-step TST or blood TB assay performed. CDC guidance should be followed for HCWs with positive results.
- d. Latex Hypersensitivity.
 - (1) HCWs must be educated regarding the signs, symptoms, and diagnoses of skin reactions associated with frequent hand hygiene and glove use during the clinic orientation and annually thereafter.
 - (2) Necessary actions will be taken to prevent allergic reactions to latex. This should include screening patients for latex allergy, and proper location and storage of latex products. HSAs shall ensure health care facilities maintain a supply of nitrile (non-latex gloves) in all patient treatment areas.
 - (3) For more information refer to current guidance from NIOSH, "*Alert: Preventing Allergic Reactions to Natural Rubber Latex in the Workplace.*"
- e. Occupational Health Considerations. Occupational Medical Surveillance and Evaluation Program (OMSEP) enrollment and tracking will be managed in accordance with reference (a), Chapter 12.
- f. Infectious Material Exposure. HCWs exposed to blood or OPIM should refer to Section 11.b of this Instruction.

11. INFECTION PREVENTION AND CONTROL PROCEDURES.

- a. Guidelines for the Health and Safety of Health Care Worker. As a component of force health protection, the following guidelines in their most current edition are utilized as applicable for the prevention and control of infection in HCWs.
 - (1) CDC and Healthcare Infection Control Practices Advisory Committee (HICPAC), Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings.
 - (2) All blood and body fluids are treated as if potentially infectious.

- (3) HCWs will use standard precautions (SP).
 - (4) Hand hygiene, a component of SP will be followed per the CDC and HICPAC: Guideline for Hand Hygiene in Health-Care Settings.
 - (5) Respiratory hygiene/cough etiquette will be followed as a component of SP. This will apply to all persons to include patients, visitors, and staff who enter a health care setting.
 - (6) All HCWs will wear PPE appropriate for the task to form a personal barrier of protection for associated exposure risk in accordance with SP.
 - (7) HCWs who manage reusable medical equipment (RME) will be provided initial training and follow established procedures based on manufacturer's instructions. Competency will be verified annually.
- b. OSHA: Bloodborne Pathogens, Final Rule.
- (1) HCWs will wear PPE appropriate for the task to form a barrier of protection against exposure to blood, other body fluids, infectious, and chemical agents from contamination of clinical attire, undergarments, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the PPE will be used.
 - (2) HCWs will wear protective outer garments (e.g., fluid resistant gowns, laboratory coats, cotton or cotton/polyester scrubs when sleeve length is long, scrub jackets) that must prevent contamination of clinical attire, undergarments, or skin and are worn appropriate for the task being performed based upon the type of exposure and quantity of these substances reasonably anticipated to be encountered during the performance of a task or procedure. Scrubs are not considered PPE.
 - (3) HCWs will ensure appropriate engineering and work practice controls are used.
 - (a) HCWs will not pass syringes with unsheathed needles.
 - (b) HCWs will not recap used needles by using both hands or other techniques that involve directing the point of a needle toward any part of the body.
 - (c) HCWs will not bend, break, or remove needles before disposal except to remove needles from non-disposable dental anesthetic syringes.
 - (d) Re-capping of needles is discouraged; however, if HCWs deem it to be necessary for the current circumstance, they will use either a one-handed scoop technique or a mechanical device designed for holding the needle cap when recapping needles (e.g., between multiple injections and before removing from a nondisposable aspirating syringe).
 - (e) HCWs will place used disposable syringes and needles, scalpel blades and other sharp items in appropriate puncture resistant containers located as close as feasible to the area in which the items are used.
 - (4) Occupational exposure to blood or OPIM:
 - (a) HCWs exposed to blood and OPIM will be evaluated and managed in accordance with Bloodborne Pathogens Standard, 29 CFR 1910.1030.

Procedures for exposure incidents will be outlined in detail in the clinic exposure control plan.

- (b) HCWs with a sharps injury, blood, or OPIM exposure will promptly wash the exposed site with soap and water. If the eye or mucous membrane is exposed to blood or OPIM, flush profusely with copious amounts of water. The HCW must report exposures to their supervisor and seek post-exposure evaluation and treatment from a credentialed provider.
- (c) HCWs will triage all exposures within 24 hours and assess the need for post-exposure prophylaxis (PEP). If PEP is deemed necessary, it is recommended to be administered as soon as possible within hours of the exposure incident and in accordance with OSHA and CDC guidelines.
- (d) HCWs will describe and document the circumstances surrounding the incident on the appropriate mishap report. HCWs must provide the necessary information to Commandant (CG-1121) Preventive Medicine Officer, HSWL SC Operational Medicine, and the treating provider to facilitate complete documentation and investigation of the incident.
- (e) In conjunction with their supervisor, federal civilian employees should report injuries by completing Federal Notice of Traumatic Injury and Claim for Continuation of Pay/Compensation, Form CA-1. Before obtaining medical treatment the employee's supervisor must authorize medical treatment by completing Authorization for Examination and/or Treatment, Form CA-16. Federal civilian employees can locate the Federal Notice of Traumatic Injury and Claim for Continuation of Pay/Compensation, Form CA-1 at: [http:// www.dol.gov/owcp/regs/compliance/ca-1.pdf](http://www.dol.gov/owcp/regs/compliance/ca-1.pdf). Authorization for Examination and/or Treatment, Form CA-16 can be obtained from the command staff advisor or human resources specialist.
- (f) The HSA and cognizant independent duty health services technician will ensure:
 - [1] The source is fully evaluated by their HCP to assess risk of bloodborne pathogen exposure to the HCW. The source will be tested as soon as possible for HIV and Hepatitis B/C.
 - [2] All required documentation of the incident is completed.
 - [3] The HCW is sent to a credentialed provider as soon as possible after exposure.
 - [4] The HCP conducting the evaluation/treatment of the exposed HCW must, in accordance with CDC guidelines, fully assess the risk of bloodborne pathogen exposure risk, initiate laboratory testing, provide indicated treatment, and documentation.
 - [5] The HCP will evaluate the laboratory test results of the HCW and the source patient. If necessary, the provider (in consultation with an infectious disease physician) will HCP recommendations for prophylaxis and further follow-up.

- [6] Exposure incidents are documented on the sharps injury log, if applicable.
- c. Guidelines for the Prevention and Control of Infection in Patients. The following guidelines used separately or in combination in their most current edition and newly developed CDC/HICPAC guidelines will be followed for the prevention and control of infection in patients. Additional current literature may be used to augment these guidelines. Clinics will adapt the program's prevention and control activities to meet the needs of their specific facilities and services. If the guidelines are cited by the clinic, those guidelines must be followed in their entireties.
- (1) Hand Hygiene: Clinics will comply with either the CDC/HICPAC or WHO guidelines.
 - (2) Isolation Precautions: Clinics will follow the HICPAC: Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings.
 - (3) Multi-Dose Medication Vial Dating and Use: Recommendations made by the United States Pharmacopoeia (USP) General Chapter 797 will be followed. Any concerns about medications will be directed to the local pharmacy.
- d. Antiseptics. The HSWL SC work group, described in Section 8.C.(3) of this Instruction, will approve the list of disinfectants and antiseptics for use in the health care setting.
- (1) This will also include any Food and Drug Administration (FDA) approved antiseptics that may be used on a patient.
 - (2) This will include FDA antimicrobial hand hygiene agents for use by HCWs.
- e. Disinfectants. The most current editions of the "CDC Guideline of Disinfection and Sterilization in Healthcare Facilities" and the "Guidelines for Environmental Infection Control in Health-Care Facilities" will be used as guides for decision making. All disinfectants must be registered with the EPA.
- (1) Disinfectants used by the clinic housekeeping services/housekeeping contracts will be maintained and approved on a separate list to ensure HCWs are not confused as to which products are approved for use by housekeeping personnel and staff.
 - (2) Household bleach (sodium hypochlorite).
 - (a) Bleach as the only ingredient will not be used as a primary hospital grade disinfectant in the clinic. It lacks detergent and may be corrosive to some surfaces. NOTE: there are many commercially available products that combine bleach or chlorine compounds with other chemicals that may be used as a primary hospital grade disinfectant. Follow the manufacturer's guidelines for use.
 - (b) Bleach may be used as an additional disinfection step if deemed necessary and approved by the HSWL SC work group, described in Section 8. C. (3) of this Instruction. For example, due to its highly effective kill of

enterovirus and spore forming bacteria (e.g., *Clostridium difficile*, *Bacillus anthracis*), bleach may be used as a second step disinfection).

- (c) Use of diluted hypochlorite (e.g., *1:10 dilution*) solution will be considered for disinfection in units with high *Clostridium difficile* associated diarrhea or colitis rates.
- (d) For dental waterline equipment, bleach is not recommended for use as a “shock” protocol agent. Clinics should use commercially available solutions (e.g. Sterilex) specifically designed to clean dental waterlines. Follow manufacturer’s instructions.

f. Cleaning, Disinfection, and Sterilization.

- (1) Procedure for preparing, contaminated, reusable instruments for reprocessing will be in accordance with the manufacturer’s instructions of the instrument and the intended use of the instrument:
 - (a) When transporting instruments from the point of use to an instrument reprocessing area (e.g., dirty utility room) wear gloves as a minimum if the instrument tray or other container with leak proof sides and bottoms has not been disinfected.
 - [1] Do not store sterile or clean instruments or supplies in the same area where contaminated instruments are held/being soaked or being cleaned.
 - [2] Minimize handling of loose contaminated instruments during transport to the instrument processing area. Use work practice controls to minimize exposure potential.
 - [3] Instruments will be carried in an instrument tray or other puncture- resistant covered container with leak-proof sides and bottom. The container will be red color-coded or designated by the facility as biohazard container, label with the universal biohazard symbol, or, if not sharp, placed into a red biohazard bag to minimize exposure potential.
 - [4] All visible blood and other contamination will be wiped from the instruments or sprayed with a solution that will keep debris and contamination moist (e.g. enzymatic solutions), if there is going to be a delay in being brought to the reprocessing area and/or to the final reprocessing area (e.g., central sterile supply, dental instrument processing).
 - [5] The use of holding solutions (e.g., enzymatic cleaner/detergent solution) is optional, but should only be considered to prevent hardening of bioburden which is then much more difficult to remove.
 - [6] Personnel will follow the manufacturer’s instruction when using an enzymatic cleaner/detergent solution.
- (2) RME and instrument re-processing, which includes dental instruments, is a complex process which requires qualified personnel to understand the importance

of performing the correct processes for cleaning, preparation, and packaging items to be sterilized, all aspects of sterility maintenance, monitoring of sterilization cycles, and storage of sterile items. Provide comprehensive and intensive training at orientation for all personnel who will reprocess non-critical, semi-critical, and critical medical/surgical instruments that will include:

- (a) Basic microbiology and infection control principles, monitoring of sterilization cycles, instruction on the proper preparation, care, handling, storage, and maintenance of sterile items following manufacturer's instructions.
 - (b) Initial orientation will be hands-on training in accordance with the organization's policies, procedures and manufacturer's instructions, and all work will be supervised until competency is documented for each reprocessing task.
 - (c) Conduct competency testing at the beginning of employment and annually. Sterile processing personnel will be able to demonstrate knowledge and have documented competence in all aspects of steam sterilization within the facility (or other types practiced within the facility) including cleaning, decontamination, inspection, and packaging of the item to be sterilized, sterilizing procedures to include appropriate monitoring of the sterilization cycle, equipment operation of the specific steam (or other) sterilizing system used in the clinic, standard/transmission based precautions, engineering and work practice controls, safety precautions, and storage of sterile items.
- (3) Sterile processing personnel should receive in-service training and competency assessment for all new instrumentation, devices, and equipment.
 - (4) Determination of appropriate levels of disinfection/sterilization shall be in accordance with established criteria for critical, semi-critical, and non-critical items.
 - (5) HCWs will use only FDA-cleared medical devices for sterilization and follow the manufacturer's instructions for correct use (e.g., cycle lengths, operating parameters).
 - (6) HCWs will prepare, package, clean, disinfect, and heat sterilize critical instruments in accordance with the instrument manufacturer, the sterilizer manufacturer's guidelines, and Association for the Advancement of Medical Instrumentation (AAMI) standard ST79.
 - (7) Biological indicators will be run in accordance with AAMI standards.
 - (a) New technologies for sterilization indicators (e.g., rapid enzyme indicators, new chemical indicators, enzyme tablets, or integrating indicators that do not contain spores) are not acceptable methods of biological monitoring in Coast Guard clinics until approved by AAMI.

- (b) Rapid readout biological indicators that contain spores and have enzyme-based early readout capability (e.g., test results at one or three hours) are acceptable when the following conditions are met:
 - [1] The biological indicator will be used within an appropriate challenge test pack.
 - [2] Mechanical and chemical monitoring processes will be performed.
 - [3] The periodic verification will be either continued incubation of the biological indicator with enzyme-based early readout capability (according to manufacturer instructions) or the use of a conventional biological indicator. If conventional biological indicators will be used in these instances, maintain a conventional incubator in the facility.
- (8) Sterilizer reports are submitted at least quarterly to the infection control officer.
- (9) Flash (immediate use) sterilization will not be used for reasons of convenience, as an alternative to purchasing additional instruments sets, or to save time. Flash sterilization is reserved for unique situations and not for routine use.
 - (a) Personnel will use mechanical, chemical, and biological indicators for each flash sterilization cycle.
 - (b) Critical instruments intended for immediate use can undergo flash sterilization if the instruments are maintained sterile during removal from the sterilizer and transport to the point of use (e.g., transported in a sterile covered container).
 - (c) Semicritical instruments that will be used immediately or within a short time can undergo flash sterilization on a tray or in a container system, provided that the instruments are handled aseptically during removal from the sterilize and transported to the point of use.
 - (d) Do not flash sterilize implantable devices.
- (10) Testing automated cleaning equipment.
 - (a) Test automated cleaning equipment (e.g. ultrasonic cleaners, instrument washer, thermal disinfectors) upon initial installation, weekly during routine use, and after major repairs in accordance with the AAMI Standards.
 - (b) Results of these tests should be included as a component of the instrument processing quality assurance program.
 - [1] Commercially available tests may used to evaluate variables such as water pressure, temperature, pH, and drying. These tests do not replace the requirement to visually inspect instruments after cleaning.
 - [2] Users must continue to follow the cleaning equipment manufacturer's operating and maintenance instructions, including instrument loading procedures, which are critical to the success of the cleaning process.

- [3] Due to the variety of brands and models of instrument washer/disinfectors available, it is recommended to first contact the manufacturer of the equipment to see if a specific washer test kit is offered or recommended. If a test kit from a manufacturer other than the equipment manufacturer is purchased, it is recommended to discuss the specific type of equipment in use at your facility (e.g., type, brand name, model of instrument washer) with the washer test kit manufacturer/distributor before purchasing any new products.
- g. Event Related Sterility. Use event-related sterility whenever possible. This practice recognizes that the product should remain sterile until some event compromises the integrity of the package (e.g., it becomes torn, wet by body fluids/water/antiseptics, dropped on a contaminated surface, presence of dried antiseptics, or yellowing caused by extremes in temperature).
- h. Reprocessing Single Patient Use Items. Reprocessing of disposable supplies and equipment items labeled as “single patient use only” will not occur in the clinics. Reprocessing may occur by a third party reprocessing company that follows the FDA Good Manufacturing Practice Guidelines and is a member of the Association for Medical Device Reprocessors (AMDR).
- i. Storage of Clean Supplies.
- (1) Storage areas will be in a clean, organized, environmentally- controlled location.
 - (2) As a general rule, like items will be stored together (e.g., sterile with sterile and clean with clean). Store liquids on lower shelves or in containers that will hold the volume of the primary container if it should leak to prevent compromise of other supplies stored next to or below.
 - (a) Sterile and nonsterile patient treatment items may be stored in the same drawers or cabinets as long as there is no possibility of similar nonsterile items being used inadvertently when sterility is required (e.g., sterile 4x4s versus clean 4x4s) is required and the items are kept separated by wipeable dividers or containers.
 - (b) All supplies will be rotated using a first-in, first-out plan so that older items are used first, thus preventing waste due to expiration.
 - (3) Supplies will be stored in compliance with the National Fire Protection Association 101, Code for Safety to Life from Fire in Buildings and Structures.
 - (4) Do not store sterile supplies or patient care items under the sink (or any location where they may become wet), on the floor, windowsills, or any area other than designated shelving or cabinets.
 - (5) Do not store sterile items with items not intended for clinical use (e.g., office supplies, cleaning supplies).
 - (6) No shipping boxes will be brought into patient care areas in the clinic, except to deliver supplies that are promptly placed into an appropriate clean storage bin.

- (a) Shipping boxes are potentially laden with contamination from animal urine and feces, which may serve as a mode of transmission of diseases associated with such contamination.
 - (b) Shipping boxes can potentially house vectors such as roaches.
 - (c) Interior boxes may be used to store a supply item, but are discarded when the last item is used and not restocked or reused to store other items.
 - (7) Rubber bands will not be used to bundle items in soft packaging (e.g. peel packs) together, they may compromise the integrity of the package.
 - (8) Chux pads or cloth towels will not be used to line drawers or shelves.
 - (9) Supply levels will be maintained in a sufficient and appropriate quantity to serve the patient care demands.
 - (10) HSAs will check monthly for any outdated supplies manufactured within or outside of the clinic that have an expiration date. Those items without an expiration date are considered to be sterile until some event compromises the integrity of the package under the event related sterility system.
 - (11) All supplies will be checked at point of use for expiration dates and for any event that may have compromised the integrity of the package (e.g., it becomes torn, wet by body fluids/water/antiseptics, dropped on a contaminated surface) before it is used for a patient.
- j. Linen.
- (1) The HSA will review the linen contract annually. Linen (e.g. scrubs, smocks, and lab coats) will not be laundered in the Coast Guard clinics.
 - (2) All clean linen will be transported and stored in carts used exclusively for this purpose or in linen carts that were cleaned and disinfected after being used to transport soiled linen.
 - (a) Clean linen will be stored in clean storage areas (e.g., dedicated linen rooms with closing door, covered carts, closed drawers or cabinets).
 - (b) Clean linen remains protected until the point of use.
 - (3) Soiled linen will be handled in a manner that minimizes dispersal of particles into the air and surrounding area.
 - (a) Soiled linen will be placed in a rolling type hamper. This will eliminate hand carrying by personnel down the corridors to a collection hamper.
 - (b) Any linen that is extremely soiled or wet may be wrapped loosely in clean linen or placed directly in a plastic bag, then into the linen hamper.
 - (4) Linen hamper covers may be used for aesthetic purposes in traffic areas; if used, they must be kept clean.
 - (5) Linen will not be rinsed or sorted in clinics that have a linen contract.
 - (6) Double bagging of soiled linen is not required unless the first bag has been damaged or is leaking.

- (7) All soiled linen will be treated as potentially infectious so there is no need to color code soiled linen into special bags based on isolation or amount of contamination (must comply with state or host country requirements).
- (8) Soiled linen will not be placed in red bags unless it is intended to be disposed of as regulated medical waste.

12. DENTAL UNIT WATER QUALITY.

a. General Recommendations.

- (1) Use water that meets EPA regulatory standards for drinking water (ie. < 500 CFU/mL of heterotrophic water bacteria) for routine (non-surgical) dental treatment output water.
- (2) Discharge water and air for a minimum of 20 to 30 seconds after each patient, from any device connected to the dental water system that enters the patient's mouth (e.g, hand-pieces, ultrasonic scalers, and air/water syringes).
- (3) Consult with the dental unit manufacturer on the need for periodic maintenance of antiretraction mechanisms.
- (4) Clean high-volume evacuator and low-volume suction lines and traps daily using an evaluation system.

b. Monitoring Dental Unit Water Quality.

- (1) Follow recommendations for monitoring dental unit water quality (provided by the manufacturer of the unit or waterline treatment product) to assess compliance with recommended protocols and identify technique errors or noncompliance.
- (2) Identification of organisms is not necessary unless investigating a waterborne illness or a unit refractory to treatment.
- (3) Maintain waterline monitoring records for a minimum of two years.

13. DENTAL RADIOLOGY.

- a. Hand Hygiene. Follow recommendations as described in Section 11.a of this Instruction.
- b. Gloving. Wear gloves when handling film sensors.
- c. Surface Barriers. Use to protect clinical contact surfaces and film sensors. Change surface barriers between patients.
- d. Heat-tolerant & disposable intraoral devices between patients in accordance with manufacturer's instruction. Use either autoclavable or disposable intraoral devices. Dispose of single use items after each use, autoclave and sterilize heat tolerant devices between patients.
- e. Transportation of exposed radiographs. Transport and handle exposed radiographs in an aseptic manner to prevent contamination of developing equipment.

14. SPECIAL DENTAL CONSIDERATIONS.

- a. Dental Laboratory.

- (1) Follow hand-hygiene recommendations as described in Section 11.a of this Instruction.
- (2) Use PPE when handling contaminated laboratory items. Although all items must be disinfected before leaving the dental operatory and before entering the dental laboratory, it is recommended to use PPE when handling items (e.g. impressions, bite registrations, occlusal rims) in the dental laboratory. Use appropriate protection (e.g. surgical mask, protective eyewear) from projectile and particulate hazards when lathes and other rotary instruments are used.
- (3) Before leaving the dental operatory and before entering the dental laboratory, clean and rinse all dental prostheses and prosthodontic materials (e.g. impressions, bite registrations, occlusal rims) by using an EPA-registered hospital disinfectant having at least an intermediate level (i.e. tuberculocidal claim) activity. To accomplish sub-surface disinfection of acrylic items, place the item in a resealable plastic bag containing an intermediate level disinfectant and place in an ultrasonic bath according to manufacturer's instructions.
- (4) Consult with manufacturers regarding the stability of specific materials (e.g. impression materials) relative to disinfection procedures.
- (5) Include specific information regarding disinfection techniques (i.e. solution used and duration) on an impression tag, when laboratory cases are sent to the lab. Prosthesis appliances being returned to the provider should have a similar tag.
- (6) When using ultrasonic cleaners, place the item (e.g. denture, temporary restoration) in a sealed, disposable plastic bag (filled with cleaning solution) into the ultrasonic machine and process. Following removal of the ultrasonic cleaner, dispose of the cleaning solution and disinfect the item before returning to the patient.
- (7) Return items used in the mouth (e.g. metal impression trays, face-bow forks) to the provider/clinic dental assistant for cleaning and heat sterilization.
- (8) Prior to reuse, clean and disinfect items (e.g. rag wheels, polishing points, burs, lathes) used on appliances previously worn by the patient, even if the appliance was cleaned and disinfected before the adjustment/repair.
- (9) If laboratory items (e.g. burs, polishing points, rag wheels, laboratory knives) are used on contaminated or potentially contaminated appliances, prostheses, or other materials, they should be cleaned and heat-sterilized between patients.
- (10) Clean and disinfect countertops, lab benches, case pans and articulators when visibly soiled, at the end of the case, and/or at the end of daily work activities.
- (11) Consumption of food and/or drinks in the dental laboratory is prohibited. These items should be consumed outside of the dental laboratory, preferably in the designated break room.

b. Dental Handpieces and Other Devices.

- (1) Follow the manufacturer's instructions for sterilization of handpieces and other intraoral instruments.
- (2) Do not surface-disinfect, use liquid chemical sterilants, or use ethylene oxide on handpieces and other intraoral instruments.

c. Oral Surgery Procedures.

- (1) Oral surgical procedures involve the incision, excision, or reflection of tissue that exposes normal sterile areas of the oral cavity. Examples include biopsy, periodontal surgery, implant surgery, surgical extractions of teeth (e.g. removal of erupted or non erupted teeth requiring elevation of a mucoperiosteal flap, removal of bone or section of a tooth, and suturing if needed).
- (2) The following apply when performing oral surgery procedures:
 - (a) Perform surgical hand antisepsis using an antimicrobial product (e.g. antimicrobial soap and water, or soap and water followed by alcohol-based hand scrub with persistent activity) before donning sterile surgeon's gloves.
 - (b) Use sterile surgeon's gloves.
 - (c) Use sterile saline or sterile water as a coolant/irrigant when performing oral surgical procedures. Use devices specifically designed for delivering sterile irrigating fluids (e.g. bulb syringe, single-use disposable products, and sterilizable tubing).
 - (d) Use sterile irrigating solutions for one patient and dispose of them appropriately. Do not date or save for later use, even on the same patient.

d. Biopsy Techniques.

- (1) During transport, place biopsy specimens in a sturdy, leakproof container labeled with the biohazard symbol.
- (2) If the biopsy specimen container is visibly contaminated, clean and disinfect the outside of the container or place in an impervious bag labeled with the biohazard symbol.

e. Handling of Extracted Teeth.

- (1) Dispose of extracted teeth as regulated medical waste.
- (2) Do not dispose of extracted teeth containing amalgam in regulated medical waste intended for incineration. Disinfect with a non-chlorine containing disinfectant, dry, and store in a sealed liquid free container until processed per local policy.
- (3) The following apply when preserving extracted teeth for educational purpose or returned to patient:
 - (a) Clean and place extracted teeth in a leakproof container labeled with a Biohazard symbol.
 - (b) Place amalgam-free teeth in a heat-resistant glass container.
 - (c) Fill the container no more than half-way with deionized or distilled water or saline and loosely cover.
 - (d) Process through a steam sterilizer at 121 °C for 40 minutes using a fluid or liquid cycle. At the end of the cycle, remove the container slowly without shaking to avoid the boiling over of the liquid.

- (e) If using extracted teeth containing amalgam, immerse in 10 percent formalin for two weeks, remove and dry. Do not heat sterilize teeth with amalgam fillings.
- f. Amalgam Waste.
 - (1) Types of amalgam waste includes: scrap amalgam; used capsules, chairside traps, vacuum pump filter, extracted teeth with amalgam fillings, amalgam from wastewater, amalgam separator waste/filters.
 - (a) Contact (amalgam that came into contact with the patient)
 - (b) Non-Contact (left over amalgam that did not contact patient)
 - (2) Forms of Disposal.
 - (a) Disposal of amalgam waste includes consulting both your base hazardous waste managers and amalgam waste recycling company.
 - (b) Non-Contact Amalgam should be stored in a wide mouth sealed, screw type container.
 - (c) Contact amalgam (traps and extracted teeth) must be disinfected with a non-chlorine disinfectant, allowed to dry and stored with non-contact amalgam in a sealed container. Extracted teeth with amalgam should NEVER be stored in liquid.
 - (d) Scrap amalgam should never be disposed of in sharps containers, red biohazard bags, in the trash, rinsed down the drain, or excess removed from placement well with high volume evacuation.
- 15. REGULATED MEDICAL WASTE (RMW). RMW will be handled in accordance with state or host nation laws governing the disposal of such waste.
- 16. FORMS/REPORTS. The forms referenced in this Instruction are available in USCG Electronic Forms on the Standard Workstation or on the Internet: <http://www.uscg.mil/forms/>, CGPortal at <https://cgportal.uscg.mil/delivery/Satellite/uscg/References>; and Intranet at <http://cgweb.comdt.uscg.mil/CGForms>.
- 17. REQUEST FOR CHANGES. Units and individuals may recommend changes by writing via the chain of command to: Commandant (CG-112); U.S. Coast Guard; STOP 7907; 2703 MARTIN L. KING JR. AVE SE; WASHINGTON, DC 20593-7907.

Maura K. Dollymore /s/
Rear Admiral, U.S. Coast Guard
Director, Health, Safety & Work-Life