



Joint Task Force National Capital Region Medical **INSTRUCTION**

NUMBER 6050.01
OCT 19 2011

J-4

SUBJECT: Management of Regulated Medical Waste (RMW)

References: See Enclosure 1

1. PURPOSE. This Instruction, in accordance with the authority in JTF CAPMED-D 5108.01 (Reference (a)):

- a. Establishes policy and provides guidance to Joint Task Force National Capital Region Medical (JTF CapMed) on the management of RMW.
- b. Provides regulatory requirements for RMW management at facilities where regulations do not exist or are less stringent than this Instruction.
- c. Ensures personnel manage RMW in a manner which minimizes occupational exposure, protects both the environment and the public, and ensures compliance with appropriate Federal and JTF CapMed issuances.

2. APPLICABILITY. This Instruction:

- a. Applies to JTF CapMed and all Joint Medical Treatment Facilities (MTFs) and Centers in the National Capital Region (i.e., Fort Belvoir Community Hospital, Walter Reed National Military Medical Center, and the Joint Pathology Center).
- b. Facilities management implementation of all engineering and administrative controls for blood-borne pathogens, and that employees use standard precautions and wear the required personal protective equipment (PPE). The use of standard precautions does not change waste management programs recommended by the Centers for Disease Control and Prevention (CDC) for health-care settings nor does using standard precautions define the classification of waste.

3. DEFINITIONS. See Glossary

OCT 19 2011

4. POLICY. It is JTF CapMed policy to:

- a. Provide guidance to JTF CapMed organizations on the management of RMW.
- b. Provide regulatory requirements for RMW management at facilities where regulations do not exist or are less stringent than this Instruction.
- c. Manage RMW in a manner which minimizes occupational exposure, protects both the environment and the public, and ensures compliance with appropriate Federal and State Regulations.
- d. Ensure RMW programs follow the guidance in U.S. Department of Health and Human Services Centers for Disease Control and Prevention and National Institutes of Health; Environmental Protection Agency EPA 530-SW-86-014; Centers for Disease Control and Prevention Guidelines for Handwashing and Hospital Environment Control; Centers for Disease Control and Prevention Guidelines for Isolation Precautions in Hospitals; Joint Commission Hospital Accreditation Standards; Joint Commission Standards for Ambulatory Care; Part 1910.1020 of title 29, Code of Federal Regulations; Parts 100-185 of title 49, Code of Federal Regulations; DoD Instruction 4500.57, and Centers for Disease Control and Prevention, "Guidelines for Environmental Infection Control in Health Care Facilities," 2003 (References (b) through (k)).

5. PROCEDURES

- a. Joint MTF and Center personnel will adhere to the principles of sustainability and pollution prevention by minimizing the use of disposable items, encouraging the use of reusable materials, and recycling to the maximum extent practicable.
- b. The Joint MTF and Center waste management system includes the segregation of waste by groups at the point of origin, and the appropriate packaging, transporting, and treatment/disposal of waste in each group. A combination of three basic approaches is used to define RMW; that is, the infectious characteristics of the waste, the types, or groups of waste, and sources of generation.
- c. The Joint MTF and Center will assess its entire waste stream annually, more frequently when necessary, to identify and document processes and areas that generate RMW. A suggested list of areas that generally may or may not generate RMW is included in this Instruction; this list is not all-inclusive.
- d. The following items shall NOT be placed into Joint MTF and Center regular trash systems: liquids, RMW, semi-solid waste (food service), universal waste, hazardous waste, empty containers from hazardous laboratory chemicals, un-punctured aerosol cans, chemotherapy and antineoplastic agents, and radioactive substances.

e. RMW and hazardous waste (HW) are different categories of wastes and are classified and managed by separate and distinct regulations. RMW will not be mixed with HW and, conversely, HW will not be mixed with RMW for purposes of disposal.

6. RESPONSIBILITIES. See Enclosure 2

7. RELEASABILITY. UNLIMITED. This Instruction is approved for public release and is available on the Internet from the JTF CapMed Web Site at: www.capmed.mil.

8. EFFECTIVE DATE. This Instruction is effective immediately.



SCOTT WARDELL

Executive Director for Administrative Operations
By direction of the Commander

Enclosures

1. References
2. Responsibilities
3. Packaging, Collecting, Marking, and Handling of RMW
4. CDC BSL 4 Etiologic Agents
5. Examples of Waste Generation Sites in an MTF or Center
6. Disposal Treatment Methods

OCT 19 2011

ENCLOSURE 1REFERENCES

- (a) JTF CAPMED-D 5108.01 “Finance and Logistics Decision Making Committee Charter,” June 22, 2010
- (b) U.S. Department of Health and Human Services Centers for Disease Control and Prevention and National Institutes of Health, “Biosafety in Microbiological and Biomedical Laboratories,” Fifth Edition, February 2007
- (c) Environmental Protection Agency EPA 530-SW-86-014, “EPA Guide for Infectious Waste Management,” 1986¹
- (d) Centers for Disease Control and Prevention, “Guidelines for Handwashing and Hospital Environment Control,” 1985²
- (e) Centers for Disease Control and Prevention, “Guidelines for Isolation Precautions in Hospitals,” 1996³
- (f) Joint Commission, “2011 Hospital Accreditation Standards: Environment of Care”
- (g) Joint Commission, “2011 Standards for Ambulatory Care”
- (h) Part 1910.1020 of title 29, Code of Federal Regulations, “Toxic and Hazardous Substances”
- (i) Parts 100-185 of title 49, Code of Federal Regulations, “Pipeline and Hazardous Materials Safety Administration, Department of Transportation”
- (j) DoD Instruction 4500.57, “Transportation and Traffic Management,” March 18, 2008
- (k) Centers for Disease Control and Prevention, “Guidelines for Environmental Infection Control in Health Care Facilities,” 2003
- (l) Department of Defense 4500.9-R, “Defense Transportation Regulations,” Part II, Chapter 204

¹ Available at <http://www.cdc.gov/od/ohs/biosfty/bmbI4/bmbI4toc.htm>

² Available at <http://www.cdc.gov/ncidod/hip/guide/handwashpre.htm>

³ Available at <http://www.cdc.gov/ncidod/hip/ISOLAT/Isolat.htm>

ENCLOSURE 2
RESPONSIBILITIES

1. JOINT MTF COMMANDERS AND CENTER DIRECTORS. Joint MTF Commanders and Center Directors shall:

a. Ensure that RMW is identified and managed according to the policies and procedures provided in this Instruction. Where this Instruction conflicts with other regulations, (for example, State, local, Final Governing Standards, Overseas Environmental Baseline Guidance Document), personnel will follow the most stringent regulation or Instruction.

b. In coordination with MTF and Center Resource Managers and JTF CapMed Director, J-8, ensure funding is available to provide for full compliance to all applicable RMW requirements.

2. LOGISTICS DIVISIONS OF JTF CAPMED MTFs AND CENTERS. The Logistics Division of JTF CapMed MTFs and Centers shall:

a. Arrange for and supervise the collection, storage, transportation, and disposal of RMW, and the training of personnel in RMW management procedures.

b. Where agreements are in place with Base Support services for coordination of RMW, ensure contracts and Memorandums of Understanding are in strict compliance with this instruction or more stringent guidelines.

3. HOUSEKEEPING, OR OTHER DESIGNATED PERSONNEL. Housekeeping, or other designated personnel, shall collect and transport RMW to the appropriate facility holding area. They will also ensure that RMW bags are available to the facility staff after normal duty hours.

4. FACILITY SUPERVISORS. Facility Supervisors shall:

a. Establish and use management controls and periodic inspections to ensure compliance with the policies and procedures in this Instruction.

b. Plan, conduct, and document training of their personnel to ensure that RMW management is conducted safely and in compliance with established policies and procedures.

OCT 19 2011

5. MTF AND CENTER PREVENTIVE MEDICINE (PVNTMED) OFFICES AND/OR FACILITIES ENVIRONMENTAL DEPARTMENT. The MTF and Center PVNTMED offices and/or Facilities Environmental Department shall assist the Logistics Division and supervisors by:

- a. Developing local RMW management implementing policies and guidance.
- b. Monitoring all phases of the management of RMW, including collection, storage, transportation, treatment, and disposal.
- c. Providing technical advice in identifying and characterizing RMW.
- d. Participating in the planning and providing of training.

ENCLOSURE 3

PACKAGING, COLLECTING, MARKING, AND HANDLING OF RMW

1. SEGREGATING RMW FROM GENERAL WASTE AND HW AT ITS POINT OF ORIGIN

a. Manage and dispose of general waste according to existing published regulations; that is, Federal, State, and local requirements. Place regular trash and recycling containers at appropriate locations in the workplace to make segregation convenient and to minimize improper segregation.

b. Place items designated as RMW into a RMW container. Place sharps into a puncture-resistant container designated for sharps use. Use RMW bags for all other medical waste items not designated as sharps. Carefully consider placement of bags and take precautions to use them on an "as needed" basis only. Refer to Enclosure 5 for areas in the hospital where RMW may be generated and where facilities should consider placing RMW collection containers.

c. Deposit RMW in leak-proof, puncture-resistant, plastic bag-lined receptacles. Use sturdy, tear-resistant, red, 3-mil thick bags. In areas where RMW is rarely generated (for example, very small labs or clinics), personnel may use bags less than 3-mil thick as interim collection bags provided these thinner bags are placed in 3-mil thick bags prior to transport within the facility. Refer to State and local requirements and ensure bag thickness complies with these regulations. Meeting State requirements regarding the thickness, strength, or color of RMW bags for waste collection takes precedence over this Instruction.

d. Securely tie and seal medical waste bags. Do not shake or squeeze the bags in an attempt to reduce volume and never compact or crush the waste to make room for more. Bags serve as the primary barrier between the RMW and the worker. Coordinate with Infection Control and the Safety Office for additional instructions on safely sealing and labeling containers to meet local requirements.

e. Carry sealed bags by their necks to the transportation cart. Do not lift or hold bags by the bottom or sides. Carry bags away from the body. Ensure bags are not broken, opened, or dropped. Never throw the bags into the carts.

f. Wear gloves and PPE appropriate for the task when handling bagged RMW. If necessary, obtain guidance from Infection Control, PVNTMED, and/or Safety.

g. When transporting RMW, or offering RMW for transport to a disposal contractor, in bulk packages, use RMW bags that meet the Department of Transportation (DOT) requirements shown in Reference (i) for tear and impact resistance. Bulk packages are defined as having a capacity greater than 450 liters (119 gallons) or net mass greater than 400 kilograms (882 pounds) per container.

h. Group 1

(1) Cultures and Stocks. Separate microbiologic waste (cultures and stocks of etiologic agents) from general waste for decontamination. Liquid Group 1 RMW (for example, liquid culture media) may be either steam-sterilized and/or disposed of in the sanitary sewer system, or kept in its original glass container and placed in the sharps container for treatment and disposal without using the sanitary sewer system.

(2) Vaccines. Discard partially full or empty vials of vaccine in sharps containers. Dispose of nasal mist vaccine dispensers in non-sharps RMW containers. Full vials subject to the pharmaceutical return's vendor program must be returned to the pharmacy in original condition. Empty carpules from dental procedures that are broken or contain visible blood should be placed in sharps containers; otherwise manage unbroken carpules that do not contain visible blood as non-regulated waste.

i. Group 2 - Pathological Waste. Dispose of pathological waste inside an RMW container lined with a plastic bag or double bag in RMW bags.

j. Group 3 - Blood and Blood Products. Unless against local, State, or host nation law, bulk blood may be disposed into the sanitary sewer. Dispose of breakable containers of bulk blood or blood products in rigid, puncture-resistant, leak-proof containers. Use plastic RMW bags to dispose of blood products such as blood bags and blood filter tubing, and items saturated, dripping, or caked with blood. Remove needles from the tubing (avoiding unsafe manipulation) and place in a sharps container for disposal.

k. Groups 4 and 7 - Sharps. Discard all sharps directly into a rigid puncture-resistant, plastic sharps container immediately after use. Discard disposable needles and syringes intact; do not cut, break, bend by hand, or recap using a two-hand method. To prevent unauthorized removal of its contents, the containers must be of a tamper-resistant design and will either be locked to a mounting device which is securely fastened to the building structure, or be located in a room or area which is under continuous supervision of ward or clinic personnel. Locate sharps containers as close as practical to the use area. The size (volume) of the sharps container will be determined by the activity serviced by that container and must be in accordance with Occupational Safety and Health Administration (OSHA) requirements for sharps containers as indicated in Reference (h). Remove and seal the sharps container when it either is three-quarters full or is filled to the line indicated by the manufacturer. Sharps containers mounted on the wall will be positioned at a height to reflect safety standards for staff, patients, and visitors.

l. Group 5 - Animal Waste. Contaminated animal carcasses, body parts, and bedding of animals that are known to have been exposed to infectious agents during research; including those produced in veterinary facilities, production of biologicals, or testing of pharmaceuticals, must be managed as RMW and be incinerated. These items must be clearly marked or labeled to indicate "incineration." When implementing this Instruction, specify if this type of animal waste is generated at the facility.

m. Group 6 - Isolation Waste (bio-safety level (BSL) 4 agents). Consult the infection control officer (ICO) for specific instructions on handling waste that contains BSL 4 agents (see Enclosure 4).

n. Group 8 - Other. Consult the ICO for specific instructions on handling RMW fluids. Free flowing fluids may need to be collected in containers as designated by the ICO. Items that are dripping or saturated with infectious agents should be placed in RMW bags.

o. Group 9 - Chemotherapy Trace Wastes. Do not mix trace chemotherapy wastes with non-chemotherapy RMW or HW. Deposit chemotherapeutic trace wastes in containers provided by the medical waste disposal contractor. These containers are normally yellow in color. Consult the MTF and Center chemotherapy drugs protocol or contact the Safety Office for additional guidance.

2. STORAGE OF RMW

a. Store RMW, excluding pathological waste, in RMW storage areas. Mark the entrance(s) to the main storage area with the words "Regulated Medical Waste." In addition to this marking, the universal biohazard symbol may also be used to mark the main storage area. Other information may be added, at the discretion of the MTF or Center, or as required by State and local requirements. Keep the main holding area secure, free from pests (for example, insects, rodents), and in a clean, putridity-free state. Indoor utility and storage rooms do not need to be secured when RMW is collected there unless dictated by local or State policy.

b. Storage of RMW must not exceed the storage times specified in current contracts for removal and disposal, and must not exceed the storage times specified by applicable State or host nation regulations. When conflicts exist, the most stringent time limits will be followed. Unusual or extenuating circumstances will be taken into consideration to allow brief or minor variances from storage time requirements.

c. Refrigerate or freeze pathological waste. Pathological waste generated at the veterinary clinic should be stored in the clinic freezer prior to pickup for disposal. The usual time for freezer storage of any RMW is approximately 30 days. Extracted human teeth need NOT be frozen if they are managed as RMW. Consult with PVNTMED/Facilities Environmental Department to determine management practices for extracted teeth (to collect in sharps containers or RMW bags). Contractual requirements or State/country rules, if more stringent, will be followed.

3. TRANSPORTATION WITHIN THE JOINT MTF AND CENTER

a. Carts used to transport RMW will be constructed of readily cleanable material, plastic, or stainless steel. If carts are equipped with lids, it is a good management practice to close the lids when transporting the RMW.

OCT 19 2011

b. When carts or other reusable containers are used to transport RMW, they must be cleaned using an Environmental Protection Agency (EPA)-registered hospital grade detergent/disinfectant or other facility-approved antimicrobial disinfectants. State and local requirements must be considered when choosing a disinfectant. Housekeeping, or other designated personnel, will be responsible for timely transportation of waste within the facility, maintenance of carts, and cleaning on a weekly basis, or more frequently if needed. If a spill occurs, the cart and impacted area will be cleaned immediately with a disinfectant.

c. Put bags of RMW in leak-proof, rigid containers and mark the containers with the universal biohazard symbol. Red bags do not need to be marked with the universal biohazard symbol unless required by State or local regulations.

d. Do not collect chemotherapy trace waste with non-chemotherapy trace waste (or HW) in the same container. Place chemotherapy trace waste in separate leak-proof, rigid containers and mark the containers with the universal biohazard symbol.

e. RMW from outlying buildings located on the installation or health service area, will be collected on a schedule approved by the facilities' environmental infection control, and/or safety officials. See paragraph 2.b. for guidance on storage times of RMW.

4. TRANSPORTATION OF RMW ON THE INSTALLATION

a. When moving RMW between buildings that are within the boundaries of the installation (that is, "on post" or "on base"), movement must be done in accordance with the installation's Transportation and Environmental Office. At a minimum, the RMW must be in rigid outer packagings and protected from shifting while being transported. Personnel moving RMW must have blood-borne pathogen training in accordance with Occupational Safety and Health Administration requirements. Designated shipping papers/manifests such as the document indicated in paragraph 5.b. are normally not required for "on post" transport of RMW. In all cases, MTFs and Centers should check with the Transportation Office for installation-specific transport requirements (handling, spill response, and State and county specific guidance).

b. RMW must be transported in a government-owned or contractor-owned vehicle. The use of privately owned vehicles for transporting RMW is prohibited. The transporting vehicle must be disinfected if a leak or spill occurs during transportation.

c. A spill containment and cleanup kit will be maintained in each vehicle transporting RMW. The kit will include appropriate PPE, a disinfectant approved by the facility, and appropriate absorbent and housekeeping equipment for cleaning up a spill. The kit may either be developed and assembled locally or commercially procured.

5. TRANSPORTATION OUTSIDE INSTALLATION BOUNDARIES

a. In the continental United States and its territories, RMW is defined by the DOT as a hazardous material. When transported in commerce (for example, over public roads), prepare RMW for shipment following the requirements in Reference (i).

b. Prepare shipping papers according to Reference (i) and applicable State requirements. Some States will require the use of a state mandated manifest. Shipping papers must be carried per Reference (j).

(1) Only a certified official may sign shipping papers according to Department of Defense 4500.9-R (Reference (l)). A DoD-certified official is a person who has successfully completed an approved DoD hazardous materials certification course and is appointed in writing by his or her MTF and Center or unit commander, to include scope of authority.

(2) When shipping RMW that is not exempt by the Material of Trade exception per Reference (j), DD Form 836, "Dangerous Goods Shipping Paper/Declaration and Emergency Response Information for Hazardous Materials Transported by Government Vehicles," must be used for transporting hazardous materials on government vehicles.

(3) The shipping MTF and Center must maintain a copy of the shipping paper for two years after the RMW is accepted by the initial commercial carrier per Reference (i). State requirements may be different; many States require generators to maintain shipping papers/manifests for three years.

c. Packages of RMW must be marked in accordance with Reference (i) and labeled in accordance with Reference (i), as well as applicable State regulations. Outer shipping containers holding trace chemotherapy waste must be marked in such a way to indicate that incineration is required. This may be done by affixing a label on the container or writing on it, or by checking the appropriate treatment method option if already printed on the container.

d. Persons who transport RMW over public roads must receive driver's training as specified in Reference (j), DD Form 836, and applicable State requirements. A commercial driver's license is not required provided the gross weight of the vehicle used is less than 26,001 pounds. All military and civilian drivers of U.S. Government-owned vehicles must have a valid State driver's license and a military driver's license.

e. There are a limited number of situations where a government employee driving a government vehicle (for example, a private carrier) is allowed to use the DOT material of trade exception in accordance with Reference (i), which provides some relief from many of the DOT requirements for transporting RMW.

6. MANAGEMENT OF RMW SPILLS

a. The Infection Control Committee and Safety Committee will approve policies and procedures that govern the management of RMW spills.

b. Clean RMW spills immediately with an EPA registered hospital grade detergent/disinfectant, or other facility approved disinfectant, which acts as a mycobacteriacide. Use higher level disinfection when advised by the local or regional medical command infection control authority. Carefully follow the manufacturer's instructions regarding the dilution of the detergent/disinfectant and contact time for disinfecting. State and local requirements must be considered when choosing a disinfectant. Spill clean-up material may be considered RMW. Consult with ICO to confirm.

c. Aerosolization of RMW is rare. If it should occur, allow the aerosol to settle and isolate the spill until it is safe to begin the cleanup.

d. PPE for cleanup workers:

(1) Wear disposable exam gloves as a minimum.

(2) Wear fluid-impervious gowns or other protective clothing when there is danger of soiling the workers' clothes.

(3) Wear a mask and protective eyewear when there is danger of splashes or aerosols coming in contact with the workers' face and eyes.

(4) Use engineering controls to pick up and dispose of any broken glass and larger volumes of RMW.

(5) Report spills, when required, by following local procedures.

7. TREATMENT/ DISPOSAL OF RMW

a. RMW is generally removed by a waste disposal contractor.

b. The following RMW treatment methods should be applied unless an alternative method is required by local or State regulations. See Enclosure 6 for more information regarding treatment methods.

(1) Render liquid microbiological waste noninfectious via steam sterilization prior to disposal into the sanitary sewer system.

(2) Steam-sterilize or incinerate solid microbiological waste prior to disposal in the general waste stream.

OCT 19 2011

(3) Treatment of blood and blood products is not required prior to their disposal in the sanitary sewer system. When sanitary sewer disposal is not allowed by local ordinance, facilities may need to treat their blood and blood products via steam sterilization and/or use RMW bags and sharps containers for disposal.

(4) Refrigerate or freeze pathological waste if not picked up immediately for disposal (see section 2 of this enclosure for storage guidance).

(5) Decontaminate wastes containing CDC BSLs 2, 3, and 4 etiologic agents (Enclosure 4) by steam sterilization, incineration, or other approved disposal technology prior to disposal. Consult the ICO for further guidance.

(6) Vaccine waste requires no treatment prior to steam-sterilization or incineration.

(7) Sharps containers require no treatment prior to incineration (or other approved disposal technologies).

(8) Store non-pathological RMW, destined to be picked up by the disposal contractor, in the designated RMW storage area (see section 2 for storage guidance).

(9) Trace chemotherapy waste requires incineration.

8. CONTINGENCY PLANNING

a. Activities will maintain detailed written contingency plans for RMW disposal when primary means of disposal are unavailable. Contingency plans must include procedures for interruption of RMW disposal when the existing RMW contractor is unable to render expected services or when environmental conditions (inclement weather, natural disaster, etc.) temporarily prevent the pickup and removal of RMW.

b. Contingency disposal actions for permanent or extended interruption of primary RMW disposal mechanisms may consist of separate agreements with other RMW service providers, reciprocal agreements with other RMW generators, or some other mechanism that will ensure RMW is managed in a legal and environmentally sound manner. Contingency plans for permanent or extended interruption of primary RMW disposal mechanisms must, as a minimum, include the following information:

(1) Name, address, and phone number of contingency RMW disposal facility.

(2) Documentation of prior coordination (letter, memorandum for record, etc.).

OCT 19 2011

- (3) Terms of the agreement, such as:
 - (a) How much waste will be accepted?
 - (b) Waste treatment method.
 - (c) Transportation and removal mechanisms.
 - (d) Frequency of waste pickup/acceptance.
 - (e) Time limits for contingency disposal.
 - (f) Costs to RMW generating MTF and Center.

c. Contingency plans for the temporary interruption of RMW disposal may consist of securing additional storage space at the facility or at another location on the installation. Contingency plans must, at a minimum, include the following information:

- (1) Capacity of current on-site RMW storage facility and estimated timeframe for how long this storage location can be used before reaching its maximum capacity.
- (2) Identity of additional on-site contingency storage location(s), capacity, and storage timeframes for contingency storage location(s).
- (3) Personnel responsible for managing and securing the contingency storage location(s).
- (4) Mechanisms for transportation of RMW to the contingency storage location(s).
- (5) Identification, by position/job function, of those who will have access to the contingency storage locations and responsibility for handling RMW at this location.
- (6) Climate control requirements for contingency storage locations, or the decision not to utilize climate controls due to the emergency situation.
- (7) Details on whether the RMW will be transported back to the primary storage facility once the emergency event has ended, or if the RMW will be picked up at the contingency storage location.
- (8) Details on training and/or credentials required for personnel working at the contingency location.
- (9) Equipment to be available for use at contingency storage locations (PPE, spill equipment, etc.), and the location of that equipment.

d. Contingency plans will meet applicable local, State, and Federal regulations and must be reviewed and updated annually.

e. Activities will notify the JTF CapMed Director of Logistics (J-4) and the Director for Resources (J-8) prior to implementing any contingency plan actions that will result in additional RMW disposal costs or modification to contracted services.

f. RMW that has BSL 4 agents will pose problems for transportation, treatment, and disposal. Companies holding contracts for routine RMW removal and disposal are likely to refuse accepting RMW containing BSL 4 agents. Consult CDC guidelines or ICO for specific guidance. In the event of an outbreak, CDC guidance should be published for specific procedures.

g. Following a suicide, violent death, or severe training accident, major blood contamination may occur on many and varied surfaces: Only properly equipped and sufficiently trained personnel shall clean up these spills. Employing, by contract, a private company that is skilled in this type of job should be considered. If properly trained, PMS/Facilities Environmental Department personnel may assist in the cleanup. However, the PMS/Facilities Environmental Department's primary mission is to advise installation personnel assisting in the cleanup on appropriate PPE and cleaning/sanitizing solutions. PMS/Facilities Environmental Department should coordinate with the ICO and the installation (or site) safety officials for additional input and guidance per the installation (or site) exposure control plan.

h. Joint MTFs and Centers will plan for and exercise emergency management topics pertaining to waste management as part of their enhanced and focused Joint Commission survey preparations.

9. RMW DOCUMENTS AND GENERATOR FEES

a. Facility personnel will weigh and record RMW prior to off-site shipment and maintain these records for a minimum of three years. If the amount of RMW sent for treatment varies by more than 10 percent from the amount billed for disposal (or documented as having been disposed), the discrepancy must be brought to the attention of the facility's Chief of Logistics and the Contracting Officer's Representative (COR) of the disposal contract. The weight of reusable RMW containers must be subtracted from the disposal weight the facility is billed for by the contractor.

b. The RMW contractor will track each container of RMW removed from a facility through final disposal to ensure proper treatment. Documentation indicating a unique tracking number for each RMW container will be provided to the facility at the time of pickup. After the waste has been treated, a treatment record will be provided back to the facility indicating the unique tracking number of each container, the method of treatment (incineration, sterilization, etc.), and the treatment facility. RMW generators must ensure all RMW containers have been accounted for and properly treated by comparing the initial pickup documents to the final treatment records. All records will be maintained for a minimum of three years. Discrepancies must be brought to the MTF and Center's Chief of Logistics and the COR of the disposal contract.

OCT 19 2011

c. All activities, regardless of the amount of RMW produced, must determine if generator, transporter, disposal, or other appropriate fees are required per State and local regulations. Activities must coordinate with the local Judge Advocate General's Office for a review of these requirements.

10. TRAINING REQUIREMENTS

a. Commanders and Directors will ensure that all employees are adequately trained to perform their duties.

b. Training in the safe handling and management of RMW is required for all Joint MTF and Center employees who come in direct contact with patients, or who generate, segregate, package, store, transport, treat, or dispose of RMW.

(1) Personnel having, or potentially having, occupational exposure to RMW will be evaluated under the facility's Exposure Control Plan and will receive annual training according to Reference (h), when required.

(2) The training should cover topics pertinent to the employee's primary job. Consult the ICO, safety manager, waste coordinator, or collateral-duty safety officer at the MTF and Center for technical assistance in determining pertinent information to be included in the training.

(3) The training will include topics related to general awareness, specific functions, safety, and security. Persons who sign shipping papers will receive specific training per References (h), (i), (j), and (l). Drivers will receive appropriate driver's training (see section 5 of this enclosure). Contractors whose duties involve handling or transporting RMW will have training that includes the topics discussed in this paragraph.

c. Initial training will include an orientation of local RMW worksite policies and procedures before the employee begins work. Recurrent training is required every two years and will include a discussion of worksite policies, procedures, and new technologies.

d. The department/service/MTF and Center managers/leaders will maintain written documentation of all training for three years. Documentation will include topic(s), content summary, date, length of training, and printed name and signatures of all attendees.

e. Department/Service/MTF and Center managers/leaders will monitor and evaluate the training. Training topics will reflect assessment of the needs of the work center. For example, an increase in needle sticks may indicate a need to increase training in use of sharps disposal systems.

f. Only qualified instructors (personnel who are knowledgeable in the subject area and have had formal and extensive training in the material) may instruct classes and oversee training to meet these requirements. Training personnel should consider instructor work experience and technical competence (knowledge of the subject matter) when making instructional assignments.

ENCLOSURE 4

CDC BSL 4 ETIOLOGIC AGENTS

Absettarov Virus	Hypr
Alkhumra Virus	Junin
Anthrax	Kumlinge Virus
Central European Encephalitis Viruses	Kyasanur Forest Disease (Presbytis spp.)
Central European Tick Borne Encephalitis Virus Complex	Lassa Virus
Congo-Crimean Hemorrhagic Fever	Machupo Virus
Ebola	Marburg
Far Eastern Subtypes	Omsk Hemorrhagic Fever
Guanarito Virus	Russian Spring-Summer Encephalitis
Hanzalova	Sabia Virus
Herpesvirus Simiae (Monkey B Virus)	Smallpox (and Smallpox-Like Cases)
<p>Source. Bio-safety In Microbiological and Biomedical Laboratories, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Institutes of Health, Fifth Edition, Feb 2007, http://www.cdc.gov/OD/ohs/biosfty/bmbI5/bmbI5toc.htm.</p>	
<p>This table will include other emerging pathogenic microorganisms when designated by the CDC or other Public Health officials.</p>	
<p>A list of BSL 2 and 3 agents may be found on-line at the following CDC link: http://www.cdc.gov/OD/ohs/biosfty/bmbI5/bmbI5toc.htm, as well as at the American Biological Safety Association's Web site: http://www.absa.org/riskgroups/</p>	
<p>The World Health Organization (WHO) classifies etiological agents into four distinct risk groups. Those agents listed as Risk Group 4 usually cause serious human or animal diseases and can be readily transmitted from one individual to another, directly or indirectly, and for which effective treatments and preventive measures are not usually available. There is high risk to individuals and high risk to the community.</p>	
<p>Many of the WHO Risk Group 4 agents are the same as those which the CDC places in the BSL 4 Group. Personnel using MEDCOM Regulation 40-35 should understand that a BSL 4 agent and a WHO Risk Group 4 agent have the same meaning for the purposes of this Instruction.</p>	

ENCLOSURE 5

EXAMPLES OF WASTE GENERATION SITES IN A MTF OR CENTER

1. All areas must use a rigid, puncture-resistant, sharps container for disposal if they generate sharps. Sharps are used in animal or human patient care, or treatment in medical, research, or support laboratories. This includes hypodermic needles, syringes (with or without the attached needle), Pasteur pipettes, scalpel blades, blood collection tubes and vials, test tubes, needles attached to tubing, and culture dishes (regardless of presence of infectious agents). Other types of broken or unbroken glassware that were in contact with infectious agents, such as used slides and cover slips, are also included in this group.

2. The following administrative areas with direct or indirect patient contact normally generate non-regulated medical waste. The waste generated is general waste and will be disposed of as such.

- a. Headquarters
- b. Patient Administration
- c. Personnel
- d. Logistics
- e. Plans, Training, Mobilization, and Security
- f. Nutrition Care
- g. Resource Management
- h. Information Management
- i. Nursing Education and Staff Development

3. The following areas with direct and indirect patient contact normally generate non-regulated medical waste. The waste generated is general waste and will be disposed of as such. Sharps generated in these areas are always considered RMW.

- a. Allergy/Immunization Clinics
- b. Social Work Service
- c. General Outpatient Clinics

OCT 19 2011

- d. Pediatric Clinics
- e. Optometry/Ophthalmology Clinics
- f. Orthopedic Clinic, including Brace Shop
- g. Radiology, including Ultrasound
- h. Pharmacy Service
- i. Occupational Health Clinic
- j. Physical Examination
- k. Community Mental Health Clinic
- l. Veterinary Service (if not engaged in research)
- m. Urology Clinic
- n. Neurology/Neurosurgical Clinic
- o. Ear, Nose, and Throat (verify if free flowing/saturated/dripping/caked blood)
- p. Central Material Section
- q. General Patient Wards

4. The following areas with direct patient care contact generate RMW (selected items) and will be disposed of as such. Sharps generated in these areas are always considered RMW.

- a. Operating Room
- b. Pathology Service
- c. Laboratory Services
- d. Blood Donor Centers (only in blood draw areas)
- e. Critical Care Areas
- f. Recovery Room
- g. Dental Clinics

h. Veterinary Clinics

i. Oncology Clinics

ENCLOSURE 6

DISPOSAL TREATMENT METHODS

Source/Type Medical Waste	Regulated	Treatment/Disposal Method
Cultures/stocks	Yes	Incineration, Thermal inactivation, chemical disinfection (for liquids only), Steam sterilization followed by incineration or grinding (check with State/local regulations if end product should be unrecognizable)
Pathological wastes (includes surgery and autopsy waste)	Yes	Incineration, Steam sterilization followed by incineration or grinding (check with State/local regulations if end product should be unrecognizable)
Blood/blood products, caked blood including blood bags and tubing.	Yes, only if free flowing, saturated, dripping, or caked	Steam sterilization, incineration, sanitary sewer system for liquids Incineration, sanitary sewer system for liquids
"Sharps" both used and unused	Yes	Incineration, Steam sterilization followed by incineration or grinding (check with State/local regulations if end product should be unrecognizable)
Vaccines	Yes	Incineration Steam sterilization followed by incineration or grinding (check with State/local regulations if end product should be unrecognizable)

Contaminated animal carcasses, body parts, and bedding	Yes	Incineration Steam sterilization followed by incineration or grinding (check with State/local regulations if end product should be unrecognizable)
Communicable disease isolation	No, except for BSL 4 or WHO Risk Group 4 agent	Check with ICO for guidance Steam sterilization Incineration
Dialysis wastes	Optional	Steam sterilization
Treatment/Examination Room*	No	General waste
General patient care areas*	No	General waste
Dental operator*	Yes, only if free flowing, item saturation, dripping, or caked with blood	Steam sterilization Incineration Sanitary sewer system for liquids
Intravenous bags and intravenous tubing	Check with State regulations	Steam sterilization Incineration

* Unless the wastes fall into one of the categories above.

**More stringent state codes may require more stringent treatment/disposal methods.

When the treatment/disposal methods shown above are not appropriate or feasible for the local situation, contracting for the transport and disposal of RMW is recommended. For planning purposes, activities must assume that RMW contractors will not accept for transportation any RMW that contains WHO Risk Group 4 or BSL 4 agents. Furthermore, activities should assume that commercial RMW treatment companies will refuse to accept for treatment and disposal any RMW that contains WHO Risk Group 4 or BSL 4 agents.

GLOSSARY

PART I. ABBREVIATIONS AND ACRONYMS

BSL	Bio-safety level
CDC	Centers for Disease Control and Prevention
COR	Contracting Officer's Representative
DOT	Department of Transportation
EPA	Environmental Protection Agency
FGS	Final Governing Standards
HW	hazardous waste
ICO	Infection Control Officer
MTF	Military Treatment Facility
PPE	personal protective equipment
PVNTMED	preventive medicine
RMW	regulated medical waste
WHO	World Health Organization

PART II. DEFINITIONS

garbage. Putrescible solid waste resulting from handling, preparation, cooking, or serving of food.

general waste. Waste that is disposed by normal waste disposal methods without pretreatment. This includes garbage, rubbish, and non-regulated medical waste. The exceptions are medical facilities operating outside the continental United States and its territories who may need to classify and manage some of the items listed as medical waste. Personnel working at these facilities should reference the FGS, or the Overseas Environmental Baseline Guidance Document, as applicable, for additional information. Similarly, some states within the United States also require management of all patient waste as RMW.

non-regulated medical waste. Solid material intended for disposal which is produced as the direct result of patient diagnosis, treatment, therapy, or medical research. Such waste is generated in the patients' sleeping, treatment, therapy, or isolation rooms (except where the patient is isolated because of an etiologic agent assigned to CDC's BSL 4 (see Enclosure 4) and rooms used for diagnostic procedures, doctors' offices, and nursing units. Examples of non-regulated medical waste include, but are not limited to, soiled dressings, bandages, disposable catheters, swabs, used disposable drapes, gowns, masks, gloves, and empty used specimen containers/urine cups. This waste requires no further treatment and is disposed of as general waste.

RMW. Waste generated in the diagnosis, treatment, or immunization of human beings or animals which is capable of causing disease or which, if not handled properly, poses a risk to individuals or a community. These wastes are also called "Infectious Waste," "Bio-hazardous Waste," "Clinical Waste," "Biomedical Waste," or simply "Medical Waste." Terms will vary based upon locality and will vary from State to State and country to country. Consists of the following categories:

Group 1. Cultures, Stocks, and Vaccines. Examples include cultures and stocks of infectious agents and associated biologicals, including cultures from medical and pathological laboratories; discarded live and attenuated vaccines; and culture dishes and devices used to transfer, inoculate, and mix cultures.

Group 2. Pathological Waste. Examples are human pathological wastes, including tissues, organs, body parts, extracted human teeth, and body fluids that are removed during surgery or autopsy, or other medical procedures, and specimens of body fluids.

Group 3 - Blood and Blood Products. Examples include:

Free flowing liquid human blood, plasma, serum, and other blood derivatives that are waste. For example, blood in blood bags, blood and/or bloody drainage in suction containers.

Items such as gauze or bandages, saturated or dripping with human blood, including items produced in dental procedures, such as gauze or cotton rolls saturated or dripping with saliva. Included are contaminated items that could release blood or related fluids if compressed. Products used for personal hygiene (for example, diapers, facial tissues, and feminine hygiene products/sanitary napkins/tampons) that is saturated or dripping with blood are not subject to the requirements of this Instruction. Trash receptacles located in public places which contain these products are also not regulated. Personnel need to use judgment in deciding when and whether these items need to be managed as RMW.

Items caked with dried blood and capable of releasing blood during normal handling procedures.

OCT 19 2011

Group 4 and Group 7. All Used (Group 4) and Unused (Group 7) Sharps. Examples include sharps used in animal or human patient care, treatment in medical, research, or support laboratories, or when used for live training purposes. This includes hypodermic needles, syringes (with or without the attached needle), Pasteur pipettes, scalpel blades, blood collection tubes and vials, test tubes, needles attached to tubing, and culture dishes (regardless of presence of infectious agents). Other examples include broken or unbroken glassware that was in contact with infectious agents such as used slides and cover slips. Syringes without needles, not tainted with body fluids, and used for procedures such as irrigation, may be discarded into the solid waste unless otherwise regulated by State or local policy. Discard unused and non-infectious glassware in boxes designated and labeled for "broken glass;" these boxes are usually found in laboratories.

Group 5. Animal Waste. Examples include contaminated animal carcasses, body parts, and bedding of animals known to have been exposed to infectious agents during research, production of biologicals, or testing of pharmaceuticals. Carcasses of road kills, euthanized animals, animals dying of natural causes and waste produced by general veterinary practices are not considered Group 5 Animal Waste.

Group 6. Isolation Wastes (including bedding, from patients or animals with BSL 4 agents). Examples include biological waste and discarded materials contaminated with blood, excretion exudates, or secretions from humans who are isolated to protect others from highly communicable diseases, or isolated animals known to be infected with highly communicable diseases caused by BSL 4 agents. This group includes pox viruses and arboviruses (see Enclosure 4).

Group 8. Other. Fluids that are designated by the local infection control authority. They may include but are not limited to semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, peritoneal fluid, pericardial fluid, and amniotic fluid. These designated fluids would be RMW when free-flowing, dripping, or saturated on substrates.

Group 9. Chemotherapy Trace Wastes. Items such as needles, empty vials and syringes, and gowns and tubing that contained chemotherapeutic pharmaceuticals or were exposed to chemotherapeutic pharmaceuticals during the treatment of patients.

rubbish. Nonputrescible solid waste comprising of the following two categories:

organic material. Examples include paper, plastics, cardboard, wood, rubber, and bedding.

inorganic material. Examples include glass, ceramics, and metal.