

DEPARTMENT OF THE ARMY
HEADQUARTERS, UNITED STATES ARMY MEDICAL COMMAND
2050 Worth Road
Fort Sam Houston, Texas 78234-6000

MEDCOM Regulation
No. 40-35

22 November 1999

Medical Services
MANAGEMENT OF REGULATED MEDICAL WASTE (RMW)

Supplementation of this regulation and establishment of forms other than MEDCOM forms are prohibited without prior approval from HQ MEDCOM, ATTN: MCHO-CL-W.

1. HISTORY. This issue publishes a revision of this publication. Because the publication has been extensively revised, the changed portions have not been highlighted.

2. PURPOSE.

a. To provide guidance to U.S. Army Medical Command (MEDCOM) organizations on the management of regulated medical waste (RMW).

b. To manage RMW in a manner which minimizes occupational exposure, protects both the environment and the public, and ensures compliance with appropriate Federal and Department of the Army (DA) Regulations.

c. This regulation does not purport to reflect regulatory variations found in many State or overseas jurisdictions. The user of this regulation must ascertain and adhere to State and local requirements.

3. REFERENCES. References are listed in appendix A.

4. EXPLANATION OF ABBREVIATIONS AND TERMS. Abbreviations and special terms used in this publication are explained in the glossary.

5. SCOPE.

a. This regulation applies to all personnel assigned, attached, or otherwise employed by the MEDCOM and its subordinate activities/medical treatment facilities (MTF).

b. This regulation implies that management requires implementing all engineering and administrative controls for bloodborne pathogens, and that employees use standard precautions and wear 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.)

c. All waste generated within the U.S. Army Medical Center (MEDCEN)/medical department activity (MEDDAC)/dental activity (DENTAC) and U.S. Army Veterinary Command (VETCOM) activities will be disposed of according to State and local regulations.

*This regulation supersedes HSC Regulation 40-35, 27 December 1993.

NOTE: When implementing this regulation, specify State and local requirements. Include contingency plans for backup if primary means of disposal is inoperable.

6. DEFINITIONS.

a. General Waste - waste that is disposed of by normal waste disposal methods without pretreatment. This includes garbage, rubbish, and nonregulated medical waste.

(1) Garbage - putrescible solid waste resulting from handling, preparation, cooking, or serving of food.

(2) Rubbish - nonputrescible solid waste comprising two categories:

(a) Organic material. Examples include paper, plastics, cardboard, wood, rubber, and bedding.

(b) Inorganic material. Examples include glass, ceramics, and metal.

(3) Nonregulated Medical Waste - solid material intended for disposal which is produced as the direct result of patient diagnosis, treatment, or therapy. Such waste is generated in patients' sleeping, treatment, therapy, or isolation rooms (except where the patient is isolated for a CDC Class 4) (see appendix B), and rooms used for diagnostic procedures, doctors' offices, and nursing units. Examples of items included in this category are soiled dressings, bandages, disposable catheters, swabs, used disposable drapes, gowns, masks, gloves, and empty used specimen containers. This waste requires no further treatment and is disposed of as general waste.

b. Regulated Medical Waste - waste which is potentially capable of causing disease in man and may pose a risk to both individuals or community health if not handled or treated properly. Sometimes called "Infectious Waste," "Biohazardous Waste," or "Medical Waste." State or local regulations may vary. Consists of the following classes:

(1) Class 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. (All other lab waste except Class 2 and Class 3 is considered general waste.)

(2) Class 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.

(3) Class 3 - Blood and Blood Products. Examples include:

(a) Free flowing liquid human blood, plasma, serum, and other blood derivatives that are waste (e.g., blood in blood bags, blood and/or bloody drainage in suction containers).

(b) 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.

NOTE: The following items saturated or dripping with blood are not subject to the requirements of this regulation: Products used for personal hygiene, such as diapers, facial tissues, and sanitary napkins/tampons (or feminine hygiene products). There was never an intent in law or by implementing regulations to manage as RMW the contents of trash receptacles in public areas. MTF personnel need to use judgement in deciding when and where these items, from patients, need to be managed as RMW.

(c) Items caked with dried blood and capable of releasing the blood during normal handling procedures.

(4) Class 4 and Class 7 - All Used (Class 4) and Unused (Class 7) Sharps. Examples include sharps used in animal or human patient care or treatment in medical, research, or support laboratories [including 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 (i.e., used slides and cover slips).

NOTE: Unused glassware may be discarded in designated and labeled "broken glass" boxes usually found in laboratories.

(5) Class 5 - Animal Waste. Examples include contaminated animal carcasses, body parts, and bedding of animals known to have been exposed to infectious agents¹ during research (including those produced in veterinary facilities), production of biologicals, or testing of pharmaceuticals.

NOTE: Carcasses of road kills, euthanized animals, animals dying of natural causes, and waste produced by general veterinary practices are not considered Class 5 animal waste.

(6) Class 6 - Isolation wastes, including bedding, from patients or animals with etiologic agents classified by the CDC as Class 4. 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 agents designated by the CDC as Class 4 in Classification of Etiologic Agents on the Basis of Hazard (1974) and Biosafety in Microbiological and Biomedical Laboratories (1999). This category includes pox viruses and arboviruses (shown at appendix B).

(7) 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 are RMW when free flowing, dripping, or saturated on substrates.

7. GENERAL.

a. MTF personnel will adhere to the principles of pollution prevention by minimizing the use of disposable items, encouraging the use of reusable materials, and recycling to the maximum extent.

¹To obtain an interpretation about how this term applies at your MTF, consult with your Veterinary, Infection Control, and PVNTMED authorities.

b. The MTF waste management system includes the segregation, by categories, of waste at the point of origin and the appropriate packaging, transporting, and treatment/disposal of waste in each category. A combination of three basic approaches is used to define regulated medical waste (i.e., the infectious characteristics of the waste, the types or categories of waste, and sources of generation).

c. The facility will assess its entire waste stream to identify areas and processes that generate RMW. A suggested list of areas that normally do and do not generate RMW is shown at appendix C.

d. The following items shall NOT be placed into hospital trash compaction systems: liquids, RMW, semi-solid waste (food service), empty containers from hazardous laboratory chemicals, aerosol cans, chemotherapy and antineoplastic agents, and radioactive substances.

e. RMW and hazardous waste (HW) are different categories of waste 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.

8. RESPONSIBILITIES.

a. The MEDCEN/MEDDAC/DENTAC/VETCOM commanders will ensure that RMW is identified and disposed of following the procedures established in this and local regulations.

b. The Preventive Medicine (PVNTMED) Service has joint responsibility with other organizational staff offices within the MEDCEN/MEDDAC/DENTAC/VETCOM for the effective management of the RMW program. The PVNTMED Service is responsible for preparation of local regulations, monitoring all aspects of RMW management including the timely collection, transportation, treatment, storage, and disposal of regulated medical waste. The PVNTMED Service is jointly responsible with Infection Control, Logistics, and Safety for identifying and characterizing RMW properly and for providing training.

c. The Infection Control Committee (ICC) provides guidance and technical consultation to departments responsible for RMW, and approves policies and procedures related to RMW.

d. Logistics Division supervises the collection, storage, transportation, and disposal of RMW.

e. Housekeeping personnel collect and transport RMW to the appropriate holding area. Housekeeping ensures that RMW bags are available to the staff after normal duty hours in the event of a spill.

f. The MEDCEN/MEDDAC/DENTAC/VETCOM supervisors will ensure compliance through proper management controls and periodic inspections. Supervisors will provide, as needed, in-service or other training to ensure that safe practices and regulatory compliance are achieved.

g. The Safety Manager or Collateral-Duty Safety Officer monitors worksites for compliance with applicable safety standards for the commander, MEDCEN/MEDDAC/DENTAC/VETCOM and participates, as needed, in providing relevant training on RMW practices.

9. WASTE MANAGEMENT PROCEDURES.

a. Manage and dispose of general waste according to existing published regulations (i.e., AR 40-5 and AR 420-49).

b. Regulated Medical Waste:

(1) Packaging, Collecting, Marking, and Handling of RMW.

(a) Segregate RMW from general waste at its point of origin. Tie the bag securely to provide a barrier between waste and worker. The bag is the primary barrier for bagged medical waste, and the sharps container is the primary barrier for sharps waste.

(b) Put regular trash and recycling containers at appropriate locations in the workplace to aid convenience and to minimize improper segregation. Use RMW bags on an "as needed" basis. In most instances, they are not placed in clinic/patient rooms unless they are required for a specific procedure or case. See appendix E for guidance.

(c) Deposit RMW in leakproof, puncture resistant, plastic bag lined receptacles. Bags used must be sturdy, tear resistant, 3 mils in thickness, and of an installation-specific color that denotes RMW (generally red). Bags less than 3 mil may be used as interim bags at selected work locations when RMW is not heavy or is rarely generated (e.g., some lab activities and some clinics) **provided** that these thinner bags are collected in 3-mil bags prior to being transported within the MTF.

NOTE: Any State requirement regarding the thickness or strength of the RMW bag must be met. Meeting the State requirement takes precedence over the thickness and strength requirement of this regulation.

(d) When sealing, the bag will not be shaken or squeezed in an attempt to reduce volume. RMW will never be compacted prior to disposal. Sealed bags (or containers) of RMW should be marked at the point of generation with the location of generation, date when sealed, and point of contact (POC).

(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.

(f) Ensure bags are not broken, opened, or dropped. Never throw bags into carts or from one individual to another.

(g) Wear gloves appropriate for the task when handling bagged RMW. If necessary, obtain guidance from Infection Control, PVNTMED Service, and Safety.

(h) Class 1 - Cultures and Stocks. Separate microbiologic waste (cultures and stocks of etiologic agents) from general waste for decontamination. Liquid Class 1 RMW (e.g., liquid culture media) may be either steam sterilized and 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.

(i) Class 1 - Vaccines. Deposit full, partially full, or empty vials of vaccine in sharps containers. Carpules from dental procedures may also be placed in sharps containers.

(j) Class 2 - Pathological Waste. Dispose of pathological waste inside an RMW container lined with a plastic bag or double bagged in RMW bags.

(k) Class 3 - Blood and Blood Products. Dispose of breakable containers of bulk blood or blood products in rigid, puncture-resistant, leakproof containers. Use plastic RMW bags to dispose of bulk blood or 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.

(l) Class 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, and 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 meet the requirements of paragraph 9b(3)(e). Remove and seal the sharps container when it either is 3/4 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 safe use and safety standards for patients and visitors.

(m) Class 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 incinerated.

NOTE: When implementing this regulation, specify if this type of animal waste is generated at the facility.

(n) Class 6 - Isolation Waste (CDC Class 4). Consult the Infection Control Officer (ICO) for specific instructions on handling waste with etiologic agents in CDC Class 4 (shown at appendix B).

(2) Transportation of RMW within the MTF:

(a) Carts used to transport RMW will be constructed of readily cleanable material, plastic, or stainless steel. Carts will be closed whenever possible.

(b) Clean carts and any other reusable containers used to transfer RMW using an Environmental Protection Agency (EPA)-registered hospital detergent-disinfectant. Housekeeping personnel will be responsible for timely transportation of waste within the MTF, maintenance of carts, and the cleaning on a weekly basis, or more frequently if needed. If a spill occurs, the cart will be cleaned immediately.

(c) Put bags of RMW in leakproof, 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) RMW from outlying medical, dental, and veterinary service buildings within the health service area will be collected on a schedule approved by the MTF's environmental, infection control, and safety officials. See paragraph 9b(4)(b) for guidance.

(3) Transportation of RMW outside the MTF:

(a) RMW destined for disposal will be transported in a government-owned or contractor-owned vehicle. The use of privately owned vehicles for transporting RMW is not authorized. The transporting vehicle must be disinfected if a leak or spill occurs during transportation. The local MTF may be able to provide transportation support to the Veterinary Treatment Facility.

(b) 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 MTF, and appropriate absorbent and housekeeping equipment for cleaning up a spill. The kit may either be developed and assembled locally or be commercially procured.

(c) RMW is defined by the U.S. Department of Transportation (DOT) as a hazardous material. When transported in commerce (e.g., over public roads), RMW will be prepared for shipment following the requirements in Title 49, Code of Federal Regulations (CFR) Parts 172, 173, and 177.

(d) Shipping papers will be prepared IAW 49 CFR 172.200 and carried IAW 49 CFR 177.817. They will be signed by a DOD certifying official IAW DOD 4500.9-R, Defense Transportation Regulations, Part II, Chapter 204. The person signing the shipping papers must successfully complete an approved DOD hazardous materials certification course and shall be appointed in writing by the activity or unit Commander, to include scope of authority. Shipping papers must include a shipping description [i.e., Regulated Medical Waste, 6.2, UN3291, PGII, (*Quantity being shipped*)] and other transportation information. The DD Form 836 (Sep 98 or later) is the standard shipping paper used for transporting hazardous materials on government vehicles. See appendix D for an example pertaining to RMW. When using DD Form 836, adhere to instructions that accompany the form, including filling out DD Form 626 for vehicle inspection. Alternative shipping papers may be used if they meet transportation requirements.

(e) Packagings (i.e., outer containers) must be rigid, leak resistant, impervious to moisture, strong enough to prevent bursting during handling, and sealed to prevent leakage during transport. Sharps containers must be able to fit within the outer packaging when off-post transport is involved. Outer containers must meet the DOT requirements for Performance Oriented Packaging as required by 49 CFR 173.197. The outer container will display the DOT Infectious Substance label whenever the military uses in-house personnel and equipment (i.e., not contractors) to transport RMW over public roads. An example is when medical personnel move RMW from outlying clinics to the main hospital using State or Interstate highways. The requirements of this paragraph are optional when moving RMW between buildings that are within the boundaries of the installation (i.e., "on post").

(f) Persons who transport RMW over public roads will receive the driver training specified in 49 CFR 177.816 and AR 600-55. A commercial driver's license (CDL) 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 (OF 346).

(4) Storage of RMW:

(a) Store RMW, excluding pathological waste, in the RMW storage area. The main holding area for the MTF will be secured, properly identified, and kept clean and free from pests (e.g., insects, rats, and animals). Soiled utility rooms do not need to be secured when RMW is collected there.

(b) Storage of RMW should not exceed 5 days: point of generation 1 day, storage area 3 days, and transport vehicle 1 day. Sharps containers are exempt from these time guidelines. Seal the sharps containers when they are 3/4 full and/or picked up for disposal. Unusual or extenuating circumstances will be taken into consideration to allow brief or minor variances from these times.

(c) Refrigerate pathological waste generated at the hospital in the morgue freezer prior to pick up for disposal. Keep pathological waste generated at the Veterinary Clinic in the clinic freezer prior to pick up for disposal. The usual time for freezer storage of any RMW is approximately 30 days.

(5) Management of RMW spills:

(a) The ICC 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 which acts as a mycobacteriacide. Use higher level disinfection when advised by the local or RMC infection control authority. Carefully follow the manufacturer's instruction regarding the dilution of the detergent-disinfectant. Minimum contact time for the disinfectant is 10 minutes.

(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, waterproof 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.

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

(6) Treatment/disposal of RMW:

(a) Liquid microbiological waste will be rendered noninfectious by steam sterilization prior to disposal into the sanitary sewer system.

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

(c) Blood and blood products require no treatment prior to disposal in the sanitary sewer system. Blood and blood products in containers may be disposed of without pretreatment either in RMW bags or sharps containers (depending on whether the container is breakable or nonbreakable). They may be treated by steam sterilization or incineration when sanitary sewer disposal is not allowed by local ordinance.

(d) Refrigerate or freeze pathological waste prior to incineration if not picked up immediately for disposal.

(e) Decontaminate wastes with CDC Class 4 etiologic agents (appendix B) by steam sterilization, incineration, or other approved disposal technologies prior to disposal. Consult the ICO for further guidance.

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

(g) Sharps containers require no treatment prior to incineration (or other approved disposal technologies) unless required by the State.

10. CONTINGENCY PLANNING.

a. MTFs will write detailed contingency plans for RMW disposal in case the primary means of disposal becomes inoperable. These plans will be revised and updated frequently (yearly at least). Contingency plans will meet all local, State, and Federal regulations.

b. Optional methods of disposal are shown at appendix E.

11. GENERATOR FEES.

a. The MTF will keep records on the rate of generation and the weight of the RMW produced.

b. All MTFs, regardless of the amount of RMW produced, must determine whether or not generator, transporter, disposal fees, and other appropriate fees will be paid according to local and State regulatory requirements. MTFs must coordinate this determination with the local Judge Advocate General's Office.

c. The funding requirements for fees related to permits and for expenses due to the need to comply with environmental regulations should be reflected on the Environmental Program Requirements (EPR) submission. Obtain guidance from the PVNTMED Service.

12. TRAINING REQUIREMENTS.

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

b. All employees of the MTF in direct contact with patients, or who segregate, package, store, transport, treat, dispose of RMW, will be provided training in RMW that is pertinent to the employee's primary job. Consult the ICO, Safety Manager, or Collateral-Duty Safety Officer at the MTF for technical assistance in determining pertinent information to be included in the training. The training will include topics related to general awareness, specific functions, and safety. Persons who sign shipping papers will receive specific training [see paragraph 9b(3)(d)]. Drivers will have driver training [see paragraph 9b(3)(f)]. 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 to local RMW work site policies and procedures before the employee begins work. Recurrent training will be conducted at least every 2 years and will include a report of work site policies, procedures, and new technologies.

d. The department/service/activity managers/leaders will maintain written documentation of all training for 3 years. Documentation will include

topic(s), content summary, date, speaker, number of hours, printed name and signatures of attendees.

e. Department/service/activity 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. The instructor for the training classes will be recognized by title and will be qualified to instruct classes based on experience, demonstrated performance excellence, and communication skills.

APPENDIX A

REFERENCES

AR 40-5, Preventive Medicine (under revision).

AR 40-61, Medical Logistics Policies and Procedures (under revision).

AR 190-51, Security of Unclassified Army Property (Sensitive and Nonsensitive).

AR 200-1, Environmental Protection and Enhancement.

AR 385-10, The Army Safety Program.

AR 420-49, Utility Services.

AR 600-55, The Army Driver and Operator Standardization Program (Selection, Training, and Licensing).

MEDCOM Suppl 1 to AR 40-61 (under revision).

TB MED 530, Occupational and Environmental Health Food Service Sanitation, (under revision).

Title 49, Code of Federal Regulations, Transportation, Parts 100-185, latest edition.

DOD 4500.9-R, Defense Transportation Regulation - Part II, Cargo Movement, August 1998.

CDC Guidelines for Handwashing and Hospital Environmental Control, 1985. Source: <http://wonder.cdc.gov/wonder/prevguid>

CDC Guidelines for Isolation Precautions in Hospitals January 1996. Source: <http://wonder.cdc.gov/wonder/prevguid>

Biosafety in Microbiological and Biomedical Laboratories, 4th Edition, Centers for Disease Control and Prevention, Atlanta, Georgia, May 99. Source: <http://www.cdc.gov/od/ohs/biosfty/bmbl4/bmbl4toc.htm>

EPA Guide for Infectious Waste Management, U.S. Environmental Protection Agency, May 1986. (EPA530-SW-86-014)

Military Item Disposal Instructions, U.S. Army Center for Health Promotion and Preventive Medicine.

APPENDIX B

CDC Classification of Etiologic Agents on the Basis of Hazard: Class 4
(listing not all inclusive).

Junin
Congo-Crimean hemorrhagic fever
Marburg
Machupo virus
Ebola
Anthrax
Lassa virus
Smallpox (and smallpox-like cases)
Herpesvirus simiae (Monkey B virus)
Tick-borne encephalitis virus complex
 Absettarov virus
 Hanzalova
 Hypr
 Kumlinge virus
 Kyasanur forest disease
 Omsk hemorrhagic fever
 Russian Spring-Summer encephalitis
 Central European encephalitis viruses
 Far Eastern subtypes
Sabia virus

[plus other emerging pathogenic microorganisms when designated by CDC or other
Public Health officials]

SOURCE:

Biosafety in Microbiologic and Biomedical Laboratories, Centers for Disease
Control and Prevention, Atlanta, Georgia, May 99. Source:
<http://www.cdc.gov/od/ohs/biosfty/bmbl4/bmbl4toc.htm>

APPENDIX C

Suggested Examples of Generation Sites.

1. All areas must use a rigid, puncture resistant, sharps container for disposal if they generate sharps [sharps used in animal or human patient care, or treatment in medical, research, or support laboratories (including 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 category.

2. All administrative areas that have a direct or indirect patient contact and generate nonregulated 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 generally generate nonregulated 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.
- 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 units.

4. The following areas with direct patient care contact generate regulated medical waste (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 draw areas).
- e. Critical care areas.
- f. Recovery room.
- g. Dental clinics.

APPENDIX D

Shipping Paper and Emergency Response
Information for Hazardous Materials Transported
by Government Vehicles
(DD Form 836)

1. NOMENCLATURE:
MODEL NO.:

TCN NUMBER:
SERIAL NO.:

BUMPER NO.:

SHIPPING PAPER AND EMERGENCY RESPONSE INFORMATION FOR HAZARDOUS MATERIALS TRANSPORTED BY GOVERNMENT VEHICLES							
THIS VEHICLE IS TRANSPORTING HAZARDOUS MATERIALS							
2a. LOCATION AND DATE PREPARED				2b. DATE OF TRAVEL		2c. PAGE OF PAGES	
TO BE COMPLETED BY THE UNIT OR SHIPPER T.O. OFFICE.							
3. CARGO							
PACKAGES		PROPER SHIPPING NAME <i>(Include RC, Technical Names, Additional Information per §172.203 as required.)</i>	HC	UN OR ID NO.	PG	NET TOTAL QTY.	TOTAL AMMO (NEW)
NUMBER	KIND						
a.	b.	c.	d.	e.	f.	g.	h.
		Regulated Medical Waste	6.2	3291	II		
4. EMERGENCY NOTIFICATION. IN ALL CASES OF ACCIDENT, INCIDENT, BREAKDOWN OR FIRE, PROMPT NOTIFICATION MUST BE GIVEN TO:							
a. SHIPPER'S ADDRESS AND TELEPHONE NO. (List 24-hour telephone number):				b. SIGNED BY:			
FOR SAFE HAVEN/REFUGE, IMMEDIATELY CALL APPROPRIATE ALC AREA HOTLINE LISTED BELOW:							
EASTERN/WESTERN UNITED STATES: 1-800-524-0331							
NEW JERSEY ONLY: 1-800-642-1381							
24-HOUR EMERGENCY ASSISTANCE TELEPHONE NUMBERS:							
DOD NON-EXPLOSIVE HAZARDOUS MATERIALS ONLY: 1-800-351-8061			DOD HAZARD CLASS 1 (EXPLOSIVES) ONLY CALL ARMY OPERATIONS CENTER - COLLECT			NATIONAL RESPONSE CENTER (NRC) 1-800-424-8802	
TO CALL FROM A SHIP: 1-800-351-8061 (COLLECT)			703-697-0218/0219			TO CALL FROM A SHIP: 202-267-2676 (COLLECT)	
			ASK FOR THE WATCH OFFICER			DOD RADIOACTIVE MATERIAL ONLY - COLLECT: 309-782-3510	
						ASK FOR STAFF DUTY OFFICER	
4c. COPY OF EMERGENCY GUIDE NUMBER(S)				ATTACHED.			
5. REMARKS							
6. CERTIFICATION THIS IS TO CERTIFY THAT THE HEREIN NAMED MATERIALS ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED, AND LABELED, AND ARE IN PROPER CONDITION FOR TRANSPORTATION ACCORDING TO THE APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION.							
a. SIGNATURE OF SHIPPER CERTIFIER				b. SIGNATURE(S) OF VEHICLE OPERATOR(S)			
b. PRINT NAME OF SHIPPER CERTIFIER							

APPENDIX E

Disposal/Treatment Methods**

Source/Type of Medical Waste	Regulated	Treatment/Disposal Method
Microbiologic Cultures/stocks	Yes	Steam sterilization 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 waste 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
"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)
Vaccine	Yes	Incineration Steam sterilization followed by incineration or grinding (check with state/local regulations if end product should be unrecognizable)

Source/Type of Medical Waste	Regulated	Treatment/Disposal Method
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 CDC Risk Group IV	Check with ICO for guidance Steam sterilization Incineration
Dialysis Waste	Optional	Steam sterilization
*Treatment/Examination Room	No	General waste
*General Patient care areas	No	General waste
*Dental Operatory	Yes, only if free flowing item saturated, dripping, or caked with blood	Steam sterilization Incineration Sanitary sewer system for liquids
Intravenous bags and intravenous tubing	Check with state regulation	Steam sterilization Incineration

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

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

NOTE: 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 strongly recommended.

GLOSSARY

ABBREVIATIONS

CDC	Centers for Disease Control and Prevention
CDL	Commerical Driver's License
CFR	Code of Federal Regulations
DA	Department of the Army
DENTACDental Activity
DOD	Department of Defense
DOT	Department of Transportation
EPAEnvironmental Protection Agency
EPR	Environmental Program Requirements
HWHazardous Waste
IAWIn Accordance With
ICC	Infection Control Committee
ICO	Infection Control Officer
MEDCEN	U.S. Army Medical Center
MEDCOMU.S. Army Medical Command
MEDDACMedical Department Activity
MTF	Medical Treatment Facility
POC	point of contact
PPE	personal protective equipment
PVNTMEDPreventive Medicine
RMCRegional Medical Command
RMWRegulated Medical Waste
SOP	Standing Operating Procedure
USACHPPM	U.S. Army Center for Health Promotion and Preventive Medicine
VETCOM.	U.S. Army Veterinary Command

The proponent of this publication is the U.S. Army Center for Health Promotion and Preventive Medicine. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) to Commander, U.S. Army Medical Command, ATTN: MCHO-CL-W, 2050 Worth Road, Fort Sam Houston, TX 78234-6000.

FOR THE COMMANDER:



CARL E. HENDRICKS
Colonel, MS
Assistant Chief of Staff for
Information Management

PATRICK D. SCULLEY
Major General
Chief of Staff

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