

DEPARTMENT OF THE ARMY
LANDSTUHL REGIONAL MEDICAL CENTER
CMR 402
APO AE 09180-0402

LRMC MEMORANDUM
NUMBER 40-98

22 April 2008

Medical Services

REGULATED MEDICAL WASTE (RMW) MANAGEMENT PROGRAM

1. REFERENCES.

- a. AR 40-5, Preventive Medicine
- b. AR 40-61, Medical Logistics Policies and Procedures
- c. AR 200-1, Environmental Protection and Enhancement
- d. MEDCOM Regulation No. 40-35, Management of Regulated Medical Waste (RMW)
- e. German Final Governing Standards (GFGS), Chapter 8, December 2002
- f. Medical Waste Disposal Contract, LRMC, 2008
- g. The Joint Commission: Comprehensive Accreditation Manual for Hospitals: The Official Handbook (current edition)

2. PURPOSE. This memorandum provides policies and procedures for the management of RMW. The policies and procedures provided are designed to minimize occupational exposure, protect human health and the environment, and to ensure compliance with the German Final Governing Standards (GFGS), applicable DA, MEDCOM, LRMC regulations, and Joint Commission standards.

3. APPLICABILITY. This program applies to all personnel assigned, attached, or otherwise employed or in volunteer status by Landstuhl Regional Medical Center (LRMC), who work with or are potentially exposed to hazardous materials or hazardous wastes. All Army Health Clinics (AHCs) are required to be in compliance with this LRMC Memorandum; however, due to differences in facility design, Final Governing Standards, and other unique elements (e.g. waste pick up schedule, etc.), AHCs will submit an addendum to the Management Plan.

4. EXPLANATION OF TERMS.

a. General Wastes. Waste not having special disposal requirements from an infection prevention or hygiene point of view. General waste is disposed of by normal methods without pre-treatment. This includes garbage, rubbish, and non-regulated medical waste.

(1) Garbage. Putrescible animal and vegetable waste resulting from the handling, preparation, cooking, and consumption of food. This includes, but not limited to, waste from markets, storage facilities, handling and sale of produce, and other food products/materials.

(2) Rubbish. Nonputrescible solid organic and inorganic wastes. Organic materials include paper, rags, plastics, cardboard, wood, furniture, rubber, and similar material. Inorganic materials include glass, ceramics, metal cans and similar material. Recycle these wastes when possible.

(3) **Non-regulated Medical Waste.** Solid material intended for disposal, which is produced as the direct result of patient diagnosis, treatment, or therapy. Typically, such waste is generated in rooms used for diagnostic procedures, doctors' offices, nursing units, and in patients' sleeping, treatment, and therapy rooms. Examples of items in this category include lightly soiled dressings and bandages, unused swabs, used disposable drapes, gowns, masks and gloves, empty unused specimen containers, IV bags, and tubing (without visible signs of blood, blood products, and/or medications), bed pans, and blood tinged gauze. This waste requires no treatment and will be disposed of as general waste; however, these wastes are not recyclable.

b. **Regulated Medical Waste (RMW).** Waste potentially capable of causing disease in man and may pose a risk to either individuals or community health if not handled or treated properly. Regulated medical waste consists of the following eight categories:

(1) **Blood and Blood Products.** Examples include:

(a) Free-flowing liquid human blood, plasma, serum, and other blood derivatives that are waste products (e.g. blood in blood bags, blood, and/or bloody drainage in suction containers). This includes free-flowing material or items saturated to the point of dripping liquids containing visible blood or blood components.

(b) Saturated disposable items having the potential to drip or splash blood/blood products. Examples include contaminated items that could release blood or related fluid when compressed (e.g., gauze, bandages, gowns, dressings, sponges, lavage tubes, drainage sets, underpads, and surgical gloves).

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

(d) IV bags and tubing that have visible signs of blood or blood products.

(2) **Used and Unused Sharps.** Examples include all Sharps used in animal or human patient care or treatment. This includes any used or unused hypodermic needles, syringes (with or without attached needles), scalpel blades, tubing with attached needles, intravenous stylets and rigid introducers, glass Pasteur pipettes, blood collection tubes, specimen tubes, blood culture bottles, used microscope slides and covers, acupuncture needles, and electrolysis needles.

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

(3) **Microbiological Wastes.** Cultures, Stocks, Vaccines. Examples include cultures and stocks of infectious agents and associated biologicals (including cultures from medical and pathological laboratories); discarded live and attenuated vaccines; culture dishes and devices used to transfer, inoculate, and mix cultures; animal vaccines which are potentially infectious to humans (e.g., Strain 19 Brucellosis Vaccine, Feline Pneumonitis Vaccine, contagious Eczema Vaccine for Sheep, Newcastle Disease Vaccine, Anthrax Spore Vaccine, and Venezuelan Equine Encephalitis Vaccine).

(4) **Pathological Wastes.** Human pathological wastes that include tissues, organs, body parts, extracted human teeth, and body fluid that are removed during surgery, obstetrical procedures, laboratory, autopsy, embalming, or other medical procedures, and specimens of body fluids.

(5) **Isolation Waste.** Biological waste and discarded materials contaminated with blood, excretion exudates, or secretions from humans who are isolated to protect others from highly communicable diseases. This includes patients with CDC Risk Group Category IV infectious agents, highly resistant

microbes, and/or infectious agents identified by GFGS. This also includes waste from isolated animals that are infected with highly communicable disease agents designated by the CDC as a Risk Group Category IV infectious disease. This category is listed in Appendix A.

(6) Animal Wastes. Contaminated carcasses, body parts, bedding, and excrements of animals exposed to infectious agents as a result of the animal being used for the production and/or testing of biologicals and pharmaceuticals or in research (including that produced in veterinary facilities). Bulk blood, blood components, and potentially infectious body fluids from these animals shall be handled as RMW. This includes all materials grossly contaminated with bulk blood, blood components, or blood products that are discarded from surgical procedures involving these animals.

NOTE: Carcasses of road kills, euthanized animals, animals dying of natural causes and waste from general veterinary practices are not considered RMW. Separate contracts can be established for the removal of these wastes from veterinary facilities.

(7) Other. Other potentially infectious material includes semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, and amniotic fluid. These designated fluids are considered RMW when free flowing, dripping, or saturated on substrates. This does not apply to feces, nasal secretions, sputum, sweat, tears, urine, or vomitus unless they contain visible blood, are from a patient suffering from a CDC Risk Group Category IV infectious disease, highly resistant microbes, an infectious disease identified within GFGS, or are from a patient who has received cytotoxic medications within 48 hours.

(8) Hazardous Pharmaceuticals. Refer to LRMC Memo 40-99, Hazardous Material and Hazardous Waste Management Program. IV Bags and contaminated material that contain hazardous substances and are also considered infectious will be handled as a special waste and managed IAW with the hazard category that presents the greatest risk. Consult with the Environmental Protection Specialist, Environmental Service Branch for proper disposal.

5. RESPONSIBILITIES.

a. **Commander, Landstuhl Regional Medical Center.** The LRMC Commander is ultimately responsible for the implementation of the Regulated Medical Waste Management Program.

b. **Chief, Environmental Health (EH), Department of Preventive Medicine (DPM).** The Chief, EH, DPM will:

(1) Prepare and update (at least annually) written local policy as required to maintain compliance with all applicable regulations.

(2) Ensure Quality Assurance (QA) and Quality Control (QC) checks through semi annual RMW inspections of wards, clinics, and Army Health Clinics (AHC).

(3) Periodically inspect RMW-producing activities and services to ensure proper segregation and storage.

(4) Periodically review and assess RMW COR's performance in the following functional areas:

(a) RMW contract management and performance.

(b) Disposal documentation and certificates.

(c) RMW central storage areas.

- (5) Oversee RMW management training semiannually and as needed.
- (6) Provide technical assistance on proper handling and disposal procedures.
- (7) Maintain current copies of the GFGS, DA, MEDCOM, and LRMC regulations.
- (8) Submit annually and maintain Environmental Protection Requirements (EPR) documentation to MEDCOM for RMW disposal contract funding.

c. **Chief, Logistics Division.** The Chief, Logistics will ensure the Environmental Protection Specialist (EPS) will:

(1) Conduct active and frequent monitoring of wards and clinics generating RMW to ensure adequate provisions are in place to support this program. This includes the following:

(a) Ensure RMW containers are properly labeled and are complete with lids prior to release to LRMC units.

(b) Ensure adequate quantities of RMW containers are available to generating units assigned to LRMC (wards/clinic, AHCs).

(c) Ensure biological/infectious container liners (red bags) meet requirements of this Memo and are in sufficient quantities to meet demand.

(d) Ensure RMW containers are properly labeled IAW 6b(1) of this Memo prior to ward/clinic removal.

(2) Ensure proper segregation, collection, storage, transportation, treatment, and disposal procedures/protocols are followed at LRMC.

(3) Manage the RMW treatment/disposal contract for LRMC and Army health clinics as the Medical Waste Officer (per GFGS). This includes:

(a) Ensuring the contractor has RMW handling and personal protective equipment training IAW contract specifications.

(b) Submitting modifications to the RMW contract as necessary to properly manage RMW or to come into compliance with new governing standards, guidance or policy.

(c) Maintaining the following information (records) in a designated binder or file for at least 3 years after date of disposal:

- Type of waste (e.g., RMW).
- Amount of waste (**number of containers**, volume, or weight) by separate ward/clinic and AHC on monthly basis.
- Date of disposition.
- Final disposal location (Ref: golden paper copy for destruction).
- All accompanying documentation including the original disposal certificate (Begleitscheine); acceptance slips (Uebernahmescheine); and the disposal manifests (Entsorgungsnachweise).

-- All accompanying documentation must be filed within 10 days of receipt and records must be kept in chronological order.

(d) Certified to sign RMW manifests by taking an approved DOD/DOT training course (e.g., USAREUR HAZ12 course; the USACHPPM Biomedical Material Transportation Course; or USACHPPM Regulated Medical Waste Management Course.)

(4) Provide RMW handling and personal protective equipment training to all Environmental Services Branch, Logistics Division personnel including contract personnel. Documentation of training will be annotated in the individual's Competency Assessment Folder.

(5) Ensure RMW collection, storage, transport, or disposal are not interrupted or otherwise adversely impacted. This includes:

(a) Ensuring contractual provisions are in place to permit adjustments to the current contract if necessary.

(b) Maintaining and implementing contingency plans for alternate sources of the services, if interruption is unavoidable. This plan will be updated at least annually. A copy of this plan will be provided to the C, EH on the annual anniversary date or when modifications to the plan are made.

(6) Ensure all carts used to transport RMW through LRMC are properly cleaned/disinfected, at least weekly. Ensure the cart MSDS binder is updated annually and has been reviewed by the C, EH and Infectious Control Nurse prior to release.

(7) Maintain RMW disposal cost records showing obligated monthly costs in US Dollars. Copies of these records will be provided to the C, EH each month.

d. Chief, Department of Pharmacy. The Chief, Department of Pharmacy will ensure all RMW-related waste products generated in the pharmacy (e.g., used Sharps) are properly disposed of in accordance with (IAW) this memorandum.

e. Deputy Commander for Clinical Services (DCCS)/Deputy Commander for Nursing (DON)/Deputy Commander for Army Health Clinics (DCAHC). The Deputy Commanders for Clinical Services, Nursing, and Army Health Clinics will ensure ward and clinic supervisors comply with this memorandum. At a minimum, ward and clinic supervisors must:

(1) Provide initial inprocessing (within first 30 days) and annual refresher RMW training to all employees.

(2) Ensure personnel properly segregate RMW from general and hazardous waste.

(3) Provide and enforce the use of proper personal protective equipment (PPE) when personnel handling RMW.

(4) Ensure RMW spills are promptly and properly cleaned IAW this memorandum and reporting procedures are followed in Appendix C.

(5) Ensure all employees read, understand, and comply with this regulation.

f. Supervisors. Supervisors will:

(1) Ensure initial in-processing, annual refresher, and in-service semi-annual RMW training is provided to all employees in their respective work areas (training requirements specified in paragraph 7).

- (2) Supervise the management and control of RMW in their work areas.
- (3) Develop ward/clinic standard operating procedures (SOPs), delineating policies & procedures for the safe use and disposal of RMW, spill prevention and spill response. This includes an annual review of the SOP for relevant changes to the program.
- (4) Ensure all personnel in contact with RMW are thoroughly trained in proper handling and disposal procedures prior to being assigned or attached to their duty section. Training must familiarize personnel with proper spill and emergency response procedures, notification protocol, location of and how to use PPE, and proper disposal procedures. This training must be documented in individual's Competency Assessment Folder and be readily available for inspections conducted by Environmental Health Division staff.
- (5) Ensure proper labels or markings are placed on all RMW containers. If an RMW container does not have a label, contact the EPS, ESB, Logistics Division at 486-7799.
- (6) Segregate waste properly and store RMW according to this memorandum.
- (7) Ensure all spills are properly controlled, contained, cleaned up, and reporting procedures are followed. See Appendix C.
- (8) Identify a qualified HW/RMW POC for each respective clinic/ward, primary and/or alternate; place POC on orders; and have POC attend the semi-annual HW/RMW training sponsored by the EH before the POC assumes HW/RMW duties. Also ensure the POC attends semi-annual refresher training.

g. Ward/Clinic/OHC HW/RMW POC. The POC will:

- (1) Manage their unit or clinic RMW program IAW policies outlined in this Memo.
- (2) Inspect their AOR on a monthly basis and document the results in their program binder.
- (3) Maintain updated duty appointment orders as the clinic representative for this program.
- (4) Attend semi-annual HW/RMW training sponsored by EH.

h. Employees. Employee(s) will be able to:

- (1) Describe emergency procedures for handling RMW in the event of a spill (Appendix C).
- (2) Describe the health hazards of mishandling RMW.
- (3) Describe reporting procedures for RMW exposures.
- (4) Follow all safety policies and procedures during storage, handling, transportation and disposal of RMW.
- (5) Notify Section Chief, HW/RMW POC, and Safety Manager immediately of any unsafe condition, act or practice.
- (6) Attend training as directed by their supervisors.

i. Infection Control Committee (ICC). The ICC will provide guidance and technical consultations to departments/wards responsible for RMW regarding disinfection procedures for spills and the types of

disinfectants approved for RMW clean-up. The ICC OIC will ensure all policies and procedures affecting the RMW program are reviewed by the C, EH prior to approval. In this way, new updates or modification to this memorandum will be assured.

6. Waste Management Procedures.

a. General Waste.

(1) Components of this program include minimizing the use of disposable items, enhancing the use of reusable items, and recycling to the maximum extent practical.

(2) Segregate general waste from RMW at the point of origin. Place general waste in appropriately lined containers using any color collection bags **EXCEPT** orange or red.

(3) Do not transport or store general waste with RMW.

b. Labeling & Marking.

(1) Clearly label all containers used to segregate, transport, or store RMW with the universal biohazard symbol. Labeling must include (a) ward/section name, (b) date sealed, and (c) a point of contact (POC) with telephone number. Individual Sharps containers will have the universal biohazard symbol. Environmental Service Branch personnel will not remove waste that is improperly bagged, sealed, or labeled.

(2) Mark designated storage areas (e.g. soiled utility rooms) with the **universal biohazard symbol** and must have a sign stating "**Restricted Area**" and/or "**Authorized Personnel Only**" in English and German (or appropriate host nation language).

c. Collecting, Packaging, and Handling of RMW.

(1) General Requirements.

(a) Segregate RMW from general waste at its point of origin.

(b) Place general waste and recycling containers at appropriate location in the workplace to aid convenience and to minimize improper segregation. Use RMW bags on an "as needed basis".

(c) Deposit RMW in leakproof, puncture resistant, plastic red bag lined containers. Line all containers with red bags that are sturdy, tear resistant, and 3 mils in thickness. Double bag containers when red bags are less than 3 mils in thickness. RMW containers containing Sharps containers do not need to be lined with a red biohazard bag, since the sealed containers serve as secondary containment. Sharps will be collected in rigid, plastic containers labeled with the universal biohazard symbol.

(d) **NEVER** shake, squeeze, or compress bags to reduce volume when sealing.

(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 ripped, opened, or dropped. Never throw bags into carts or from one individual to another.

(g) Secure all red bags in RMW containers when **full** by securing the tops with tape, twist ties, or rubber bands. Apply self-locking, tight fitting lids to the containers when they are three-quarters full or when the waste poses unsanitary conditions due to odor or appearance. Containers are not to exceed 28 kg (61 lbs) in weight.

(h) Sharps Containers. Designated staff members will seal Sharps containers when three-quarters full by snapping the lids closed. Place wall mounted sharps containers and other small sharps containers in RMW containers located in secured areas.

(2) Blood and Blood Products. Do not dispose blood or blood products, regardless of the volume, into the sanitary sewer system. Bulk blood or blood products in breakable containers (e.g. glass vials) must be placed in rigid, puncture-resistant, leakproof containers (i.e., Sharps containers). Bulk blood or blood products in non-breakable containers (e.g. blood bags and blood filter tubing, and items saturated or dripping with blood) will be placed in red bag-lined RMW containers. Discard partially used IV bags or bottles containing blood into red bag-lined RMW containers. Disconnect Sharps attached to IV bags or bottles (avoiding unsafe manipulation) and place in Sharps containers before disposal of the IV bags or bottles. Used IV bags or bottles that do not contain visible blood or medications will be disposed of as general waste. Return full, unused IV bags and bottles to the Pharmacy for reuse or disposal.

(3) Used and Unused Sharps. Discard all Sharps directly into rigid, puncture-resistant, plastic Sharps containers immediately after use. Disposable needles and syringes will be discarded intact and not cut, broken, bent by hand, or recapped. To prevent unauthorized removal of contents, containers will be tamper resistant and must either be: (1) locked to a mounting device, which is securely fastened to the building structure or (2) be under continuous supervision of ward or clinic personnel. Sharps containers will be located as close as practical to the area of use and placed at a height to reflect safe use and safety standards for patients and visitors.

(4) Microbiological Waste. Separate microbiological waste (cultures and stocks of etiologic agents) from general waste. Keep liquid culture in its original glass container and place in a Sharps container for treatment and disposal. Contaminated glassware and devices capable of puncturing red bags, to include items used to transfer, inoculate and mix cultures and full/ partially full or empty vials of live or attenuated vaccine agents, will be placed in sharps containers. Other microbiological waste will be placed in a red bag-lined RMW container for disposal.

(5) Pathological Waste. Seal pathological waste inside a red bag and place in a red bag-lined RMW container (i.e. double bagged).

(6) Animal Waste. Contaminated animal carcasses, body parts, excrements, and bedding of animals that were known to have been exposed to infectious agents during research (including that produced in veterinary facilities), production of biologicals, or testing of pharmaceuticals will be placed in a red bag-lined RMW container. Carcasses and body parts will be sealed in red bags and placed into a red bag-lined RMW container (i.e. double bagged). Carcasses will be dismembered and segregated to prevent container weights from exceeding 50 pounds.

(7) Isolation Waste. All waste generated from a patient suffering from a CDC Risk Group IV infectious disease, highly resistant microbes, and/or infectious agents identified by the German Final Governing Standards will be disposed of as RMW (see Appendix A).

(8) Hazardous Pharmaceuticals. Discard patient care items contaminated with body fluids (e.g., blood) from patients who have received cytotoxic medications in a red bag-lined RMW container. Label containers as special waste in accordance with LRMC Memo 40-98 and properly dispose of them as RMW.

d. Transportation of RMW within LRMC.

(1) General.

(a) Environmental Services Branch personnel are responsible for timely collection and transportation of waste within the hospital, maintenance of carts, and cleaning of carts (at least weekly) using an approved hospital grade detergent-disinfectant (see Appendix B). RMW **will not** be collected at the same time as general waste.

(b) The RMW disposal contractor is responsible for timely collection and transportation of waste from LRMC to a permitted RMW disposal facility.

(c) Ward personnel will carry red bags and Sharps containers to the soiled utility room. Personnel handling RMW will wear disposable, waterproof gloves. Sealed red bags will be carried by their necks, away from the body and not lifted or held by the bottom or sides. Care should be taken to ensure bags are not ripped, opened, or dropped. Bags will never be compressed into RMW barrels to reduce volume.

(d) Personnel will wear general purpose, heavy duty, work gloves when picking up RMW containers from individual wards.

(2) Transportation.

(a) Carts used to transport wastes through LRMC will be constructed of leak-proof material (plastic or stainless steel) and easily cleaned/disinfected. If a spill or leak occurs, the cart will be cleaned immediately. Do not leave carts unattended in areas such as corridors, elevators, etc. where patients or the public might access them. Closed or covered carts will always be used.

(b) RMW containers will be transported from ward storage areas to a central storage area at least once per week. Environmental Services Branch will provide this service. Ensure that transportation of RMW inside the medical facility is kept to an absolute minimum.

(c) Wards/clinics without a secured storage area (soiled utility room) and/or consolidated storage with another unit must transport red bags and Sharps containers in RMW containers to the consolidated storage area. These containers can be obtained from the Environmental Services Branch, Logistics Division.

(d) For information on pick-up, disposal schedules, request for increasing the frequency of pick-ups, and procedures, contact the Environmental Services Branch, Logistics Division at DSN 486-7799 or 8866.

e. RMW Transportation Outside LRMC.

(1) Regulated Medical Waste will not be transported off-post on public roadways without a signed manifest completed IAW German and United States regulations.

(2) The vehicle must remain secure at all times while transporting wastes.

(3) Maintain a spill containment and clean-up kit in each vehicle transporting RMW. Disinfect vehicle if a leak or spill occurs as soon as possible.

(4) The operator of the vehicle transporting the RWM will have proper training in handling and responding to a RMW. Said individual will also have proper PPE on hand and have been trained in the use of the PPE.

f. Storage of RMW.

(1) General.

(a) Store properly sealed RMW containers in a secured area (e.g., soiled utility room) until pick-up by the Environmental Services Branch, Logistics Division.

(b) Transfer properly filled and sealed RMW containers from patient care areas to a secured area on the ward (soiled utility room). If storage area is under constant supervision by staff personnel, room does not need to be locked.

(c) Line containers before use and label and seal when the containers are three-quarters full. Use RMW container lids to cover the container (without applying the self-locking seal) when the containers are not in active use or are not three-quarters full. Improperly bagged, sealed, or labeled RMW containers will not be removed from the ward/clinic by Environmental Services Branch until corrected.

(2) Soiled Utility Rooms. Ward/clinic personnel will maintain soiled utility rooms and prevent access to unauthorized personnel. Staff members shall secure these rooms if not under constant supervision.

(3) Central Storage Facility. The LRMC RMW central storage facility will not be utilized for purposes other than storing RMW. The storage facility will be secured, fully enclosed and operated in such a manner to minimize entry by rodents and vectors, and to minimize or prevent foul odors from migrating off-site. It will be constructed of smooth, easily cleanable materials that are impervious to liquids, labeled with signs containing the phrase "Biohazardous" in both English and German (or appropriate host nation) languages and the universal biohazard symbol.

(4) Storage Time. Storage of RMW at the central storage facility should be kept as short as possible. IAW the FGS, storage at the LRMC central storage facility shall not exceed 7 days at temperatures at and below 59 degrees Fahrenheit (15 degrees Celsius), while storage time for pathological waste maintained in a freezer will not exceed 30 days. Storage time at the LRMC Army Health Clinics will not exceed 14 days at temperatures at and below 41 degrees Fahrenheit (5 degrees Celsius). RMW not maintained at the temperatures mentioned above will be stored for no more than 3 days.

h. Management of RMW Spills.

(1) Personal Protective Equipment (PPE). Spill response personnel will wear disposable, waterproof gloves, at a minimum. Wear gowns or other protective clothing when there is a risk of soiling the workers' clothes. Wear a mask and protective eyewear if splashes or aerosols could contact the worker's face or eyes.

(2) Detergent-disinfectant. Clean RMW spills using approved hospital grade detergent-disinfectant (see Appendix B). Carefully follow the manufacturers' instructions regarding the dilution of the detergent-disinfectant. Minimum contact time for the disinfectant is 10 minutes.

(3) Spill Clean-up Procedures.

(a) Medical staff will immediately clean-up small spills. Refer to Appendix C for notification procedures. Clean-up procedures will be performed as follows:

- Secure the area around the spill and don required personal protective equipment.
- If aerosolization occurred, allow the aerosol to settle and isolate the spill until it is safe to begin the clean-up.
- Spray the leak or broken container with detergent-disinfectant.

- Use engineering controls (i.e. forceps) to properly pick up and place broken glass in sharps containers. Other containers and spilled debris should be placed in RMW receptacles.
- Spread sufficient absorbent or paper towels to absorb and contain the spill.
- Collect the absorbent and place it in a RMW receptacle. Manage the absorbent as RMW.
- The area contaminated by the spill must be cleaned using soap and water and chemically disinfected.
- Place any other used disposable items into a RMW receptacle.
- Disinfect all reusable equipment and tools (i.e. scoop or dustpan) used in the clean-up.

(b) For small spills (approximately one square foot), a Bloodborne Pathogen/bodily Fluid Spill kit can be used. These kits should be on hand and can be obtained from EH. Follow the instructions provided by the spill kit. FGS require that soap and water be used in addition to the chemical disinfectant provided in the kits.

i. Treatment/Disposal of RMW.

(1) Treatment/Disposal. Regulated medical waste is treated and disposed of through the LRMC RMW disposal contract. The Department of Pathology may autoclave microbiological wastes, excluding Sharps, and dispose of the treated waste as general waste.

(2) Contingency Plan. A detailed contingency plan/contract must exist for RMW disposal in the event that the primary means of disposal becomes inoperable. Contingency plans will meet all local regulations. These plans will be revised and updated annually, at a minimum (Ref. 5.c. (5) (b)).

j. Waste Mixtures.

(1) Mixtures of general wastes and RMW will be handled as RMW.

(2) Mixtures of RMW and hazardous wastes (environmental wastes) will be managed as infectious or hazardous waste. Priority will be given to the hazard that presents the greatest risk. For guidance, contact EH at DSN 486-8405 or 8489.

7. TRAINING REQUIREMENTS.

a. General. All LRMC employees, including volunteers, who have direct patient contact, or who segregate, package, store, transport, treat, or dispose of RMW will be provided RMW training specific to the employee's primary job. To request In-Service Training, contact EH, DPM, LRMC.

b. Requirements.

(1) Supervisors will provide initial training and an orientation to local RMW work site policies and procedures before the employee begins work. Initial, annual CBT, Swankhealth, and EOC training will be annotated in Section 4 of the Competency Assessment Folder. Semi-annual training events (i.e., training specific to the unit or clinic) will be captured in Section 5 and will include a review of RMW-related policies, procedures relevant to the workplace and job-specific requirements.

(2) Written documentation of training will be maintained in each staff member's Competency Assessment Folder. Ward/clinic leaders will maintain this documentation of training for 3 years.

(3) Departments will monitor and evaluate training. Training topics will reflect the needs of the work center.

c. Ward/Clinic/AHC HM/HW/RMW POC. AHC Commanders and Clinic/Ward OICs/NCOICs will select a HM/HW/RMW POC and place on orders with duties specified in paragraph 5.g. This individual will receive initial training before starting duties as the HM/HW/RMW POC by attending one of the required semi-annual HM/HW/RMW training sessions conducted by the EH staff. Semi-annual refresher training is required to keep the HM/HW/RMW POC current on RMW issues.

8. TECHNICAL SUPPORT. Contact the following activities for additional information.

a. Environmental Science Officer (ESO), Environmental Health Division (EHD), Department of Preventive Medicine (DPM) at DSN: 486-8407/8405.

b. Environmental Protection Specialist (EPS), Environmental Services Branch (ESB), Logistics Division at DSN: 486-7799/8866.

9. PROPONENT. The proponent of this memorandum is the Chief, Environmental Health Division (EHD), Department of Preventive Medicine (DPM), LRMC.



BRIAN C. LEIN
COL, MC
Commanding

3 APPENDIXES:

- A - CDC Risk Group Category IV
- B - Approved Disinfectants for RMW Spills
- C - Emergency Spill Notification Procedures

DISTRIBUTION:

A & C

APPENDIX A

ISOLATED WASTES

CDC Classification of Etiologic Agents on the Basis of Hazard Class IV (*listing not all-inclusive*).

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

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

Multi Resistant Microbes

- * Methicillin-Resistant *Staphylococcus aureus* (MRSA)
- * Vancomycin Resistant *Enterococcus* (VRE)
- * Vancomycin Resistant *Staphylococcus aureus* (VRSA)

Pathogenic Agents Identified by the German Final Governing Standards (GFGS)

- | | |
|-----------------------------------|----------------------------------|
| * Cholera | * Leprosy |
| * Paratyphoid fever (types A,B,C) | * Plague |
| * Pocks (Smallpox) | * Poliomyelitis |
| * Dysentery | * Rabies |
| * "Tularaemia" rabbit plague | * Viral "Haemorrhagisches" fever |
| * "Brucellose" | * Diphtheria |
| * Meningitis/encephalitis | * Q-fever |
| * "Rotz" (malleus) (Glanders) | * Tuberculosis (active form) |
| * Viral hepatitis | |

Other:

- * *Clostridium difficile*
- * Active Hepatitis

APPENDIX B

APPROVED DISINFECTANTS FOR RMW SPILLS

- a. Submit written requests for new products or substitutions to the Infection Control Committee for approval before purchase.
- b. Wear Personal Protective Equipment (PPE) while handling any product per manufacturer's recommendations and maintain Material Safety Data Sheet (MSDS) for product information.
- c. Products listed below are IAW LRMC Pamphlet 40-9.

CHEMICAL AGENT	BRAND NAMES	USES
Alcohol	70% Isopropyl Alcohol Any brand, sterile single use swab sticks or pads	Patient skin preparation agent Umbilical cord disinfectant May be used to disinfect external surfaces of equipment (e.g., stethoscopes)
Aldehyde	Cidex	High-level instrument disinfectant for CMS ONLY
Calgon, Calgonite		CMS and OR use only for instruments
Chlorhexidine Gluconate	CHG 2% CHG 4% Hibiclens Operand DynaHex	2% CHG – Antimicrobial hand washing agent 4% CHG – Antimicrobial hand washing agent, Surgical Scrub, pre-operative patient showers.
Chlorine	Bleach (5.25%) Sodium Hypochlorite	Must be diluted at a 1:10 ratio (1 part bleach to 10 parts water) Plastic Bottle – 24 hour shelf life Dark glass bottle – 30 day shelf life. Environmental disinfectant Recommended for use in cleaning refrigerators and ice machines.
Contract Housekeeping Products	Cavicide Wipes Kleen-A-Septic Terralin	For Housekeeping use only.
Kleenzyme	Substitute must be approved by ICC	Used for initial decontamination/cleaning of endoscopes.
Paracetic Acid	No substitutes	Used in STERIS systems
Phenolic	Perform Microbac Matar Tergisyl Wexcide (Phased out June 03)	Environmental disinfectant to be used on inanimate objects NOT to be used to clean instruments reprocessed in CMS NOT TO BE USED IN NICU OR NEWBORN NURSERY
Quaternary Ammonium Compounds (Quats)	Terralin Kleenaseptic B A-33 Sani-Cloth Germicidal Towelettes	Environmental disinfectant recommended for disinfecting patient equipment to include patient beds, exam tables. For use on inanimate objects only. Recommended for use in NICU & Newborn Nursery
"T" Spray	Vaginal Ultrasound Transducer Probe Disinfectant	For use to disinfect vaginal ultrasound transducer ONLY. Approved for use in Radiology (Ultrasound) and OB/GYN ONLY.
Vesta-syde Enzol	Substitute must be approved by ICC	Instrument cleaner for initial decontamination of reusable instruments processed through CMS.

APPENDIX C

EMERGENCY SPILL NOTIFICATION PROCEDURES

MANDATORY NOTIFICATION POINTS OF CONTACT:

FOR ALL SPILLS, THE FOLLOWING INDIVIDUALS WILL BE CONTACTED:

DURING THE DUTY HOURS:

- Inform your supervisor;
- Environmental Protection Specialist (EPS): 486-7799/8866;
- Safety Officer: 486- 8616; and,
- Environmental Science Officer (ESO): 486-8407/8405/8489/6909.

DURING NON-DUTY HOURS:

- Inform your supervisor;
- Contact AOD to report incident: 486-8106/6307; and,
- Notify EPS, Safety Officer, and ESO the next duty day.