

Medical Waste Management Plan

University of California, Davis

Center for Neuroscience

Updated: October 28, 2008

This Program document provides a step-by-step method to assist managers of medical waste storage/accumulation sites in preparing a Medical Waste Management Plan. Completing this guide constitutes creation of a Plan as required by the Medical Waste Management Act. Your plan will be included in the UC Davis Medical Waste Generator/Accumulation Site/Treatment Facility Permit. One copy must be available at each generation/accumulation facility, one copy must be submitted to the Office of Environmental Health & Safety (EH&S), and one copy must be submitted to the administrative section of the department responsible for the storage/accumulation site. Complete Supplement A if you are operating an autoclave for treatment of medical waste.

Department: Center for Neuroscience

Department Chair: Edward G. Jones Phone: (530) 754-9137

Safety Coordinator: Crystyn Ruth Phone: (530) 757-8905

Laboratory Location(s): 1544 Newton Court, 1633 DaVinci Court and 1515 Newton Court
(Point of origin of medical waste)

Medical Waste Storage/Accumulation with Off-Site Treatment

Storage/Accumulation Site: 1544 Newton Court (room 137), 1515 Newton Court (room 425), 1633 DaVinci Court (room 124W)

Operated by (Department): 1544 Newton Court and 1633 DaVinci Court – Center for Neuroscience; 1515 Newton Court – School of Medicine Office of Sponsored Programs.

Hauler/Treatment Facility:

1) The UCD Medical Center Medical Waste Treatment Facility will collect, transport and treat the Medical waste from 1515 Newton Court (room 425). The UCD Medical Center Medical Waste Treatment Facility will collect, transport and treat the Medical waste from 1633 DaVinci Court (room 124W).

2) Stericycle will pick up and transport chemotherapy waste from 1633 DaVinci Court.

3) Pathology waste will be collected, transported, and incinerated by Stericycle Inc. from 1544 Newton Court (room 137) and 1633 DaVinci Court (room 124W).

4) Transportation and treatment of medical waste will be documented and a copy provided to the Department operating the Storage/accumulation site. The hauling/treatment records can be accessed in: A) CNS – for 1544 Newton Court and 1633 DaVinci Court, contact person – Crystyn Ruth (1544 Newton Court, room 121, (530) 757-8905). B) 1515 Newton Court (room 425), contact person – Cecilia Penick (4209C Tupper Hall, (530) 752-7152).

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I. DEFINITIONS:

A. Biohazardous waste is waste that may contain pathogens capable of replication and capable of causing disease in humans, animals or plants.

B. Medical waste is biohazardous waste and/or sharps waste that may contain agents infectious to humans. **Medical waste includes biohazardous waste capable of causing disease only in humans.**

Medical waste **does not** include the following:

1. Waste generated in food processing or biotechnology that does not contain an agent infectious to humans.
2. Sharps waste that is not contaminated with medical waste.
3. Waste generated in biotechnology that does not contain human blood or blood products or animal blood or blood products suspected of being contaminated with agents infectious to humans.
4. Urine, feces, saliva, sputum, nasal secretions, sweat, tears, and vomitus, unless it contains fluid blood from humans or animals known or suspected to have agents that are infectious to humans.
5. Waste that is not biohazardous, including items such as paper towels, surgical gowns or bandages that contain non-fluid blood.
6. Hazardous chemical waste, radioactive waste, and household waste.
7. Waste generated from normal and legal veterinary, agricultural, and livestock-management practices.

C. Medical Sharps waste is discarded material that has acute rigid corners, edges or protuberances capable of cutting or piercing as described below:

1. All discarded hypodermic needles attached to syringes or tubing, blades, and syringes contaminated with medical waste.
2. Discarded medical appliances, sharp devices, broken glass or plastic laboratory equipment, Pasteur pipettes, vacutainer tubes, etc. that are contaminated with medical waste.

D. Agents infectious to humans are microbial agents including viruses, bacteria, rickettsia, protozoa, spores, mold, and fungi that are indicated by scientific evidence to cause disease in humans.

E. Biohazard bags are disposable *red* bags of sufficient strength to preclude ripping, tearing or bursting under normal conditions of usage and handling of a filled bag. The bag must meet the standards prescribed by American Society for Testing and Materials (ASTM) Standard D 1709-85 and must be certified by the bag manufacturer. Bags must be conspicuously labeled with the words "Biohazardous Waste" or with the international biohazard symbol and the word "BIOHAZARD."

Note: Orange bags are prohibited from use on the UC Davis campus.

F. Sharps containers are rigid, puncture-resistant containers that, when sealed, are leak resistant and cannot be reopened without great difficulty. Medical waste sharps containers must be labeled with the international biohazard symbol and the word "BIOHAZARD".

G. Mixed hazardous or radioactive wastes are wastes that contain a mixture of two or more of the following: medical waste, radiological waste, and hazardous chemical waste.

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II. TYPE OF MEDICAL WASTE GENERATED and/or TREATED (Check all that apply):

Bagged waste Sharps Animal carcasses

Manure/Bedding Other (list below):

chemotherapy waste (in 1633 DaVinci Court only)

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III. SEGREGATION, CONTAINMENT, LABELING & COLLECTION OF MEDICAL WASTE

A. Medical waste generated on UC Davis Campus or approved off-campus sites

1. Segregation of medical waste:

- a. Medical waste will be segregated at the point of generation in each laboratory work area. Waste will be placed in **red** biohazard bags labeled with the words "Biohazardous waste" or with the biohazard symbol and the word "Biohazard." Biohazard bags will be sealed at the point of origin to prevent leakage or expulsion of contents when they are ready for transport, treatment and disposal.
- b. Biohazard bags will be labeled with the building and room number where the waste is generated. Bags will be placed in labeled, leak-proof secondary containers with tight-fitting covers. Medical waste bags will not be removed from the secondary container except for transfer to another secondary container or to the secondary storage container at the storage/accumulation site (*room 425 for labs in 1515 Newton Court and 1544 Newton Court; and room 124W at 1633 DaVinci Court for labs in 1633 DaVinci Court*). Bags should not weigh more than 40 pounds.
- c. Bagged medical waste will be transported in secondary containers to the designated storage/accumulation site and removed only when transferred into other secondary containers.

Note: Any medical waste generated off-campus from animal trapping, off-site animal housing, or other procedures that generate medical waste from UC Davis sources must be placed in bags that are placed in secondary containers, and transported to an approved campus treatment site or other approved medical waste treatment facility. A written plan must be developed by the generator and approved by EH&S prior to generation of waste.

if medical waste from off-campus UC Davis sources will be treated, place an "X" in this box and attach written procedures for handling such waste to this Plan.

2. Disposal of Sharps: Medical waste sharps will be placed in approved medical waste sharps containers prior to disposal. Medical waste sharps containers will be labeled with the generator's building, and room number. Transport sharps containers to the designated storage/accumulation site and place in labeled medical waste containers.

NOTE: Non-medical sharps will be placed in sharps containers or other rigid puncture resistant, leak resistant container with a tight fitting lid, that are not labeled as medical waste. These containers must **not** have biohazard symbols or any wording indicating medical waste, biohazard waste, or biohazard and should **not** be orange or red in color.

3. Disposal of Fluids: Liquid blood and body fluids not known to contain agents infectious to humans may be discharged with copious amounts of water to the campus sewage system. Mixing liquids with a 1:10 final volume of chlorine bleach with a minimum contact time of 30 minutes is recommended by UCD EH&S in SafetyNet # 3. If liquid medical waste cannot be disposed of to the campus sewage system, contact EH&S for alternative disposal methods.
4. Disposal of Waste that Cannot be Autoclaved on-site or sent to the UCD Medical Center Medical Waste Facility: The following are defined as medical waste but cannot be treated or collected by UCDCM. This waste will be treated and disposed of by incineration in an approved medical waste incinerator.
 - a. All recognizable human anatomical remains (except teeth).
 - b. Human specimens or tissues that have been fixed in formaldehyde or other fixatives. Secondary containers must be labeled "Pathology Waste" or "PATH". *Formaldehyde must be disposed of separately as Hazardous Waste.*
 - c. Waste that is contaminated through contact with, or having previously contained, antineoplastic agents. Secondary containers must be labeled "Chemotherapy Waste" or "CHEMO".

The above waste will be collected for incineration by:

Vendor: Stericycle Inc.

Indicate type of waste generated: pathology waste (*See section on disposal of animal carcasses for details*)

Vendor: UC Davis Medical Center, Environmental Services

Indicate type of waste generated: chemotherapy waste

5. Disposal of Animal Waste and Bedding:

a. Animal waste and bedding known or suspected of containing agents infectious to humans will be placed in biohazard bags and autoclaved at an EH&S approved medical waste autoclave or incinerated at an approved medical waste incinerator.

b. Animal carcasses:

1. Animal carcasses containing agents infectious to humans will be handled, treated, and disposed of as medical waste. *Perfused and unperfused primate carcasses and large amounts of primate tissue will be picked-up by Stericycle Inc. for incineration (800) 345-2362 or (916) 985-5506. Please contact Crystyn Ruth (530.757.8905) for the appropriate purchase order number before contacting Stericycle.*

2. Animal carcasses **NOT** carrying or contaminated with agents infectious to humans can be placed in plastic bags (use bags without the BIOHAZARD labeling or bags that are not red) and placed in designated animal carcass containers/freezers. *At 1544 Newton Court and 1633 DaVinci Court, to dispose of noninfectious animal tissue/carcasses, call the CLAS office (752-1390) to place a work order or contact the CLAS/CNS animal care staff. At 1515 Newton Court, carcasses/tissue are placed in the freezer located in room 425.*

6. Mixed Hazardous or Radioactive Waste Handling:

a. Medical waste containing hazardous chemicals require special handling, transporting, treating, and/or disposal methods. This waste is handled on a case by case basis.

b. Medical waste containing radioactive materials require special handling, transportation, and disposal and is handled as required by our campus-broad scope license for use of radioactive materials.

c. Contact EH&S at 752-1493 prior to generating mixed medical and/or

hazardous or radioactive waste to develop an approved written disposal protocol.

IV. MEDICAL WASTE STORAGE/ACCUMULATION SITE

- A. Containment: Medical waste will be placed in red biohazard bags within an approved secondary container, or in approved sharps containers, at the point of generation. Medical waste may be stored at room temperature up to seven (7) days after generation prior to treatment.

Note: It is recommended that Medical waste be treated, e.g. autoclaved, soon (within one or two days) after generation.

EH&S will be contacted immediately at 752-1493 if medical waste cannot be treated within the seven day time limit.

- B. Site security: EH&S approved storage enclosures and accumulation areas will be secured by locking access doors or receptacle lids to prevent unauthorized entry and posted with warning signs containing the wording, "CAUTION--BIOHAZARDOUS WASTE STORAGE AREA--UNAUTHORIZED PERSONS KEEP OUT" and "CUIDADO--ZONA DE RESIDUOS--BIOLOGICOS PELIGROSOS--PROHIBIDA LA ENTRADA A PERSONAS NO AUTORIZADAS." Medical waste in secondary containers must not be stored in unsecured, common use autoclave rooms.

V. DISINFECTION PROCEDURES FOR TREATMENT OR CLEANING OF MEDICAL WASTE SPILLS & DECONTAMINATION OF REUSABLE RIGID CONTAINERS:

- A. Secondary-container Disinfection: Secondary containers for biohazard bags will be disinfected on a monthly basis and whenever leakage occurs from the bags.

1. One of the following chemical sanitizers must be used (indicate solution(s) used with an 'X' below):

a. Hypochlorite solution (500 ppm available chlorine)

b. Iodophore solution (100 ppm available iodine)

c. Quaternary ammonium solution (400 ppm active agent)

d. Other disinfectant that is effective against the specific organism(s) used. Indicate disinfectant and concentration to be used:

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2. The container will be rinsed, sprayed or immersed in the sanitizer. The sanitizer will remain in contact with container surfaces for a minimum of **three minutes** before washing.

B. Procedures for Using Chemical Disinfectants for Spills:

1. Use appropriate commercial disinfectants. Label directions must be followed.
2. The minimum required contact time for decontamination is thirty minutes (30).
3. Spill Cleanup Materials must be Autoclaved. Chemical disinfectants are not approved as substitutes for an approved treatment process.

Note: Use disinfectant that is compatible with the treatment process.

VI. EMERGENCY ACTION PLAN:

A. Equipment Failure:

1. Non-sharps medical waste can be held up to seven days prior to treatment. This should be adequate time to restore equipment to service.
2. If medical waste is disposed of frequently (daily), adequate time should be available to secure an alternate treatment facility or equipment.
3. Primary and alternate medical waste hauling and treatment vendors are listed below. If an alternate approved vendor or facility cannot be located, EH&S at 752-1493 will be contacted as soon as possible for assistance.

Primary:

UCDHS Environmental Services
UC Davis Medical Center Treatment Facility
(916) 734-3777

Secondary:

Stericycle Inc.
(800) 345-2362 or
(916) 985-5506

B. Natural disasters:

1. In the event of a natural disaster that may interfere with treatment and disposal of medical waste, all non-essential medical waste generating activities will be suspended immediately.
2. Spills and releases of biohazardous agents will be handled by the campus Fire Department Emergency Response Team in conjunction with EH&S and the campus Police Department (call 911).

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VII. CERTIFICATON

I hereby certify that to the best of my knowledge and belief the statements made herein are correct and true:

Department Chair: _____ Date: 10/31/2008

Safety Coordinator: _____ Date: 10/31/2008