

The Department of Nutrition Medical Waste and Management Plan (MWMP) is mandated by the California Health and Safety Code [<http://www.dir.ca.gov/title8/5193.html>] through the California Medical Waste Management Act (MWMA) [<http://www.cdph.ca.gov/certlic/medicalwaste/Documents/MedicalWaste/MWMAfinal2012.pdf>]. This Act regulates the handling, storage, treatment and disposal of medical waste and requires permitting of haulers and treatment facilities and registration of accumulation/storage sites and generators. On the UC Davis campus, the State Department of Health Services, Medical Waste Management Program, enforces the MWMA.

► Failure to strictly comply with the rules set forth in this plan can result in fines and criminal penalties as described in

MWMA chapter 10, sections 118325-118360.

This 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 Environmental Health & Safety (EH&S) and

One copy must be submitted to the administrative section of the department responsible for the storage/accumulation site.

General information

Department name: Nutrition

Chair: Dr. Francene Steinberg Phone: (530) 752-0160 Building: Meyer Hall Room: 3135B

Department contact: Dr. Mike Satre (DSC) Phone: (530) 220-6277 Building: Meyer Hall Room: 3205

Type of medical waste generated and/or treated (Please check all that apply.)

Red bag medical waste Sharps Animal carcasses Manure/bedding

Other (please specify): _____

Medical waste transportation vendor Stericycle

Medical waste inactivation vendor Stericycle

Autoclave locations (Please contact the Biosafety Office (biosafety@ucdavis.edu) if you plan to operate an autoclave for treating medical waste.) NOT APPLICABLE

Medical waste picked up and treated by an approved vendor

Medical waste must be collected, transported and treated by an approved vendor. A copy of this documented process will be given to the department operating the storage/accumulation site.

The Medical Waste accumulation site is:

Building: Meyer Hall Room: Locked cage on loading dock (North side of Meyer Hall)

Contact person: Dr. Mike Satre (Nutrition DSC) Phone: (530) 220-6277 Building: Meyer Hall Rm: 3205

Backup contact: Leslie Oberholtzer (An.Sci. DSC) Phone: (502) 225-6696 Building: Meyer Hall Rm: 1334

The hauling/treatment records can be accessed in:

Building: Meyer Hall Room: 2251 – see Cynthia Stillwell (530) 752-1262

Building: Meyer Hall Room: 3205 – see Mike Satre (Nutrition dept. records prior to 2012)

Contact person: Dr. Mike Satre (Nutrition DSC) Phone: (530) 220-6277 Building: Meyer Hall Rm: 3205

Backup contact: Leslie Oberholtzer (An.Sci. DSC) Phone: (502) 225-6696 Building: Meyer Hall Rm: 1334

Medical waste generators

A “Medical waste generator” means any person whose act or process produces medical waste, and includes, but is not limited to, research laboratories, education and research facilities.

List each person who generates medical waste **in your LAB** as well as the waste type and the location where it is generated.

Meyer Hall:

Rm: 3309	Name: Marjorie Haskell	Waste: Red bag Medical Waste / Medical Sharps
Rm: 3323	Name: Jodi Ensunsa	Waste: Red bag Medical Waste / Medical Sharps
Rm: 3328	Name: Reed Fong	Waste: Red bag Medical Waste / Medical Sharps
Rm: 3329	Name: Tina Du	Waste: Red bag Medical Waste / Medical Sharps
Rm: 3329	Name: Ruland Jiang	Waste: Red bag Medical Waste / Medical Sharps
Rm: 3401	Name: Tony Momma	Waste: Red bag Medical Waste / Medical Sharps
Rm: 3401A	Name: Harpreet Chima	Waste: Red bag Medical Waste / Medical Sharps
Rm: 3402	Name: Andrew Clifford	Waste: Red bag Medical Waste / Medical Sharps
Rm: 3402	Name: Heidi Kucera	Waste: Red bag Medical Waste / Medical Sharps
Rm: 3402	Name: Angela Zivkovic	Waste: Red bag Medical Waste / Medical Sharps
Rm: 3402	Name: Romina Sacchi	Waste: Red bag Medical Waste / Medical Sharps
Rm: 3407	Name: Harpreet Chima	Waste: Red bag Medical Waste / Medical Sharps
Rm: 3407	Name: Jodi Ensunsa	Waste: Red bag Medical Waste / Medical Sharps
Rm: 3415	Name: Shinichiro Koike	Waste: Red bag Medical Waste / Medical Sharps
Rm: 3415A	Name: Shinichiro Koike	Waste: Red bag Medical Waste / Medical Sharps
Rm: 3426	Name: Darya Mishchuk	Waste: Red bag Medical Waste / Medical Sharps
Rm: 3426	Name: Jennifer Smilowitz	Waste: Red bag Medical Waste / Medical Sharps
Rm: 3426	Name: Melissa Breck	Waste: Red bag Medical Waste / Medical Sharps
Rm: 3426	Name: James Graham	Waste: Red bag Medical Waste / Medical Sharps
Rm: 3427	Name: Jody Randolph	Waste: Red bag Medical Waste / Medical Sharps
Rm: 3430	Name: James Graham	Waste: Red bag Medical Waste / Medical Sharps
Rm: 4305	Name: Eleonora Cremonini	Waste: Red bag Medical Waste / Medical Sharps
Rm: 4306	Name: Mingfo Hsu	Waste: Red bag Medical Waste / Medical Sharps
Rm:	Name:	Waste:
Rm:	Name:	Waste:
Rm:	Name:	Waste:

Training requirement for persons who generate medical waste: All individuals who generate, handle, or transport medical waste to an accumulation site must be trained in safe practices and in legally-mandated requirements for managing waste in accumulation sites to ensure safe highway transport. Training in safe practices is offered by Environmental Health and Safety and by the School of Medicine (for SOM staff), and training in DOT requirements is offered by the medical waste transportation vendor or by your medical waste accumulation site manager/contact person.

► It is expected that all individuals who fall under the definition of “medical waste generators” have read and fully understand the definitions, rules and procedures as set forth in this departmental Medical Waste Management Plan.

I. DEFINITIONS

A. Biohazardous waste is waste that is known to, or may contain, pathogens capable of replication and of causing disease in animals, plants or humans. Such waste falls under the definition of “*Regulated Waste*” as defined in the California Health and Safety Code.

- 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.**

This includes, but is not limited to all of the following:

1. Human or non-human primate fluid blood and blood components and products (cells, serum/plasma);
2. Human or non-human primate cell, tissue or organ cultures;
3. Culture media or other solutions contacting human cells, organs or tissues
4. Unfixed human cell, organ or tissue specimens (other than intact skin);
5. All human anatomical remains (except teeth);
6. Human body fluids other than blood including sputum, nasal secretions, sweat, tears urine, semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva, vomitus or feces that is visibly or suspected to be contaminated with blood.
7. Animal parts, tissues, organs, cells, fluids, or carcasses known or suspected of being contaminated with infectious agents known to be contagious to humans.

- C. Medical sharps waste** are “sharps” contaminated with biohazardous waste.

“**Sharp**” means any object used or encountered and discarded that has acute rigid corners, protuberances or edges, capable of cutting or piercing skin or other part of the body.

Medical sharps waste includes but is not limited to:

1. All discarded hypodermic needles attached to syringes or tubing, lancets, scalpels, acupuncture needles, blades, root canal files and syringes contaminated with **medical** waste.
2. Discarded medical appliances, sharp devices, broken glass or plastic tubes or laboratory equipment, Pasteur pipettes, vacutainer tubes, hematocrit tubes, pipet tips, etc. contaminated with **medical** waste.

- D. Agents infectious to humans** includes microorganisms including, but are not limited to viruses, bacteria, Chlamydia, rickettsia, protozoa, and fungi that are known to cause disease in humans.

- E. Non-Medical Waste.** 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 not contaminated with medical waste. Note that nonmedical waste sharps must be disposed of in specifically designated nonmedical waste sharps containers
3. Waste generated in biotechnology that does not contain human 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 or other body fluids **unless** they contain fluid blood from humans or animals known or suspected (treated with agents or show symptoms) to have agents infectious humans.
5. Nonbiohazardous waste such as paper towels, surgical gowns or bandages that contain **nonfluid** blood.
6. Hazardous chemical waste, radioactive waste and household waste.
7. Waste generated from normal, legal veterinary, agricultural, and livestock management practices on a farm or ranch.

- F. Biohazard bags** are disposable **RED** bags of sufficient strength to preclude ripping, tearing or bursting under normal use and handling when full. The bag must meet Standard D 1709-85 and 1922 as prescribed by American Society for Testing and Materials (ASTM) and must be certified by the bag manufacturer as such. Bags must be conspicuously labeled with the words “BIOHAZARDOUS WASTE” or with the international biohazard symbol and the word “BIOHAZARD.”

Note: Orange biohazard waste bags are prohibited in California.

- G. Sharps containers** are rigid, puncture-resistant containers that, when sealed, are leak resistant and cannot be reopened without significant difficulty. Medical waste sharps containers must be labeled with the international biohazard symbol and the word "BIOHAZARD."
- H. Mixed medical waste (hazardous or radioactive wastes)** contain a mixture of Medical waste together with radioactive and/or hazardous chemical waste.

II. SEGREGATION, CONTAINMENT, LABELING AND COLLECTION OF MEDICAL WASTE

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

1. Segregation and containment of medical waste

- a. Medical waste will be segregated at the point of generation in each laboratory or other work area. Waste will be placed in **RED** biohazard bags labeled with the words "BIOHAZARDOUS WASTE" or with the international biohazard symbol and the word "BIOHAZARD."
- b. Biohazard bags will be **labeled** with the **building, room number** and a **contact phone number** (using a permanent ink marker), or affixed with a pre-printed sticker displaying this information.
- c. 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. Biohazard bags will be sealed by tying a knot using only the complete, single upper part of the bag (no two-sided "rabbit ears" or "shoe-lace" style knots; no tape or twist-ties).
- d. Bags will be placed in labeled, **leakproof secondary containers** with tight-fitting covers. Medical waste biohazard 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. Bags should not weigh more than 40 pounds
- e. Sealed, bagged medical waste will be transported in secondary containers to the designated storage/accumulation site and removed only when transferred into other secondary containers.
- f. At the storage/accumulation site, individual, sealed biohazard medical waste bags will be logged and placed into the large Stericycle-supplied bins containing a red, biohazard bag "liner".
- g. All secondary containers must be labeled with the words "BIOHAZARDOUS WASTE" or with the international biohazard symbol and the word "BIOHAZARD" on the lid and on the sides, so as to be visible from any lateral direction.

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 biohazard bags that are placed in secondary containers, before being 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 such off-site waste generation.

- If the medical waste treated is from an **off campus** source, place an "X" in box to the left and attach to this plan written procedures for handling such waste.

2. Disposal of medical waste sharps

- a. Medical waste sharps will be placed in approved medical waste sharps containers prior to disposal. Only approved, locking lid medical waste sharps containers can be used.
- b. Medical waste sharps containers will be **labeled** with the **building, room number** and a **contact phone number** (in permanent ink), or affixed with a pre-printed sticker displaying this information.

- c. Medical waste sharps containers must be labeled with the words "BIOHAZARDOUS WASTE" or with the international biohazard symbol and the word "BIOHAZARD." When full (contents reach fill line), transport the sharps containers to the designated accumulation site and place in labeled medical waste containers.

Note: Nonmedical sharps will be placed in sharps containers or other rigid, puncture-resistant, leak-resistant containers with a tight fitting lid that are **not** labeled as medical waste. These containers must not have biohazard symbols or any wording indicating the type of biohazard waste or biohazardous material.

3. Disposal of fluids

- a. Human and non-human primate blood and body fluids, and the blood and body fluids of animals known or suspected to harbor human infectious agents, **must** be treated by adding chlorine bleach to a final concentration of at least 10%, and incubated for at least 30 minutes. The treated material can be disposed in the sanitary sewer.
 - If liquid medical waste cannot be disposed of to the campus sewage system, contact EH&S for alternative disposal methods.

4. Disposal of animal waste and bedding

- a. Animal waste and bedding known or suspected (treated with agent or shows symptoms) of containing agents infectious to humans is considered medical waste and must be handled and treated accordingly.
- b. Animal carcasses containing agents infectious to humans will be handled, treated and disposed of as medical waste. Contact EH&S for information on developing a handling, treatment and disposal plan.

5. Mixed Medical hazardous or radioactive waste handling

- a. **Medical waste containing hazardous chemicals** is subject to regulation as specified in the statutes and regulations applicable to hazardous waste, and requires special handling, transporting, treating and/or disposal methods. This waste is handled on a case-by-case basis.
- b. **Medical waste containing radioactive materials** is radioactive waste and is subject to regulation as specified in the statutes and regulations applicable to radioactive waste and requires special handling, transportation and disposal and is handled as required by our campus-broad scope license for use of radioactive materials.
- c. **Medical waste containing both hazardous and radioactive waste** is subject to specific regulations. This waste is handled on a case-by-case basis.

→ **Contact EH&S** at (530)-752-1493 **prior to generating** any mixed medical hazardous and/or radioactive waste to develop an approved written disposal protocol.

III. MEDICAL WASTE STORAGE / ACCUMULATION SITE

A. Containment

Medical waste will be placed either in red biohazard bags within an approved secondary container or into a sharps container, as appropriate, at the generation point. Medical waste may be stored at room temperature up to seven days after generation before treatment.

B. Site security

Secure EH&S-approved storage enclosures and accumulation areas with locking access doors or receptacle lids to prevent unauthorized entry.

Medical waste in secondary containers must **not** be stored in unsecured, common-use rooms including autoclave rooms.

C. Required Postings

Post a sign on the exterior of entry doors, or adjacent to the entry doors. The sign must include the warning:

1. "CAUTION – BIOHAZARDOUS WASTE STORAGE AREA – UNAUTHORIZED PERSONS KEEP OUT" and "CUIDADO – ZONA DE RESIDUOS – BIOLÓGICOS PELIGROSOS – PROHIBIDA LA ENTRADA A PERSONAS NO AUTORIZADAS."
2. The universal biohazard symbol.

IV. TREATMENT AND TRACKING RECORDS

A. A medical waste generator required to register pursuant to this chapter shall maintain individual treatment, and tracking records, if applicable, for three years, or for the period specified in the regulations, and shall report or submit to the enforcement agency, upon request, both of the following:

1. Treatment operating records.
2. An emergency action plan complying with regulations adopted by the California Department of Public Health.

B. The hauling/tracking and treatment records can be accessed in the locations and with the designated contacts listed on page 1 of this plan.

V. DISINFECTING MEDICAL WASTE SPILLS and DECONTAMINATING REUSABLE, RIGID CONTAINERS

A. Secondary-container disinfection

1. Secondary containers for biohazard bags will be disinfected once every 30 days or whenever leakage occurs from the bags.
2. One of the following chemical sanitizers must be used (indicate solution(s) used with an 'X' below):

- Hypochlorite solution (500 ppm available chlorine)
- Iodophore solution (100 ppm available iodine)
- Quaternary ammonium solution (400 ppm active agent)
- Other disinfectant that is effective against the specific organism(s) used.
Indicate disinfectant and concentration to be used:

3. 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 disinfectants for spills (consult UC Davis Safety Services/EH&S SafetyNets 51, 68, 85, 127 and supplied as appendices at the end of this plan)
1. Use appropriate commercial disinfectants, and follow label directions.
 2. The minimum required contact time for decontamination must be based on a risk assessment of the material to be decontaminated and the disinfectant properties. Risk assessment must be documented in the laboratory safety manual.
 3. Spill cleanup materials must be disposed as medical waste.

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

VI. EMERGENCY PLANNING

A. Natural disasters

1. In the event of a natural disaster that may interfere with the disposal of medical waste, all nonessential, 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).

VII. CERTIFICATION

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

Department Chair: Francene Steinberg

Date: 1/15/2016

Signature



1-15-2016

Department Safety
Coordinator (DSC): Mike Satre

Date: 1/15/2016

Signature



1-15-16