Regulated Medical Waste Management and Proper Waste Segregation
California
Objective: Understand how to properly segregate waste streams and properly handle the most common regulated waste.

I. Waste Stream Overview
II. Identifying & Segregating Waste
III. Managing RMW Collection and Storage
IV. Proper Packaging of RMW
V. Labeling & Documentation
VI. DOT Requirements
VII. Summary
Waste Stream Overview: Improper Segregation Practices

General waste commingled with RMW.

General waste commingled with RMW and loose sharps.
Consider Pharmaceutical Waste and the recent studies regarding its impact on the environment:

“Researchers are finding evidence that even extremely diluted concentrations of pharmaceutical residues harm fish, frogs, and other aquatic species in the wild. Also researchers report that human cells fail to grow normally in the laboratory when exposed to trace concentrations of certain drugs.”

“The healthcare industry is contributing to the contamination of the United States’ drinking water supplies by dumping tons of unused drugs annually.” TheStar.com, September 30, 2008

Keep non-controlled substance, non RCRA hazardous pharmaceutical waste out of conventional RMW and general waste streams. Unused and expired medications should be placed in your pharmaceutical waste container.
Waste Stream Overview: Your Legal Obligation

- OSHA mandates special waste handling for Regulated Medical Waste to protect staff members and waste haulers.

- DOT, EPA, and state regulations dictate special transport and handling requirements for a variety of RCRA hazardous wastes.

- Signed manifests indicate your responsibility for the contained wastes and proper segregation.
Identifying & Segregating Waste: Regulated Medical Waste

Cal-OSHA’s Definition of Regulated Medical Waste

- Liquid or semi liquid blood or other potentially infectious material (OPIM)
- Contaminated items that contain liquid or semi-liquid blood or are caked with dried blood or OPIM; and
- Are capable of releasing these materials when handled or compressed
- Contaminated sharps
- Pathological and microbiological wastes containing blood or OPIM
- Medical waste regulated by California Health and Safety Code
California Health and Safety Code

Sections 117600 - 118360
Biohazardous Waste

California Health and Safety Code:

- Laboratory waste cultures and stocks
- Sharps waste
- Contaminated waste
  - Pathological
  - Chemotherapeutic
  - Pharmaceutical
- Human surgery specimens/tissues suspected of being contaminated with infectious agents known to be contagious to humans
- Animal parts/tissues/carcasses suspected by veterinarian of being contaminated with infectious agents known to be contagious to humans
- Excretions, exudates, secretions from humans/animals that are required to be isolated by the infection control staff, attending physician, veterinarian, or local health officer, to protect others from highly communicable diseases or diseases of animals that are highly communicable to humans
Registration of Medical Waste Generators (Shippers)

- Generators (shippers) of medical waste, both SQ and LQ, are required to register with either:
  - Local Enforcement Agency (LEA)
  - California Department of Public Health (CDPH)

- Counties with LEAs are listed on next slide, or with CDPH (if there is no LEA and State acts as LEA).

RCRA Hazardous Waste ID Number

- Generators (shippers) of RCRA hazardous waste (such as dental offices) must also obtain an ID number from California Department of Toxic Substances Control DTSC.
- This is sometimes called the EPA ID Number.
<table>
<thead>
<tr>
<th>Local Enforcement Agencies</th>
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</thead>
<tbody>
<tr>
<td>Alameda County of Solid/Medical Waste Mgmt.</td>
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<tr>
<td>Colusa County Environmental Health</td>
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<tr>
<td>Contra Costa County Environmental Health</td>
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<tr>
<td>Del Norte County DPH Env. Mgmt. Dept.</td>
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<tr>
<td>Kings County Division of Environmental Health</td>
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<tr>
<td>Lassen County Health and Human Services Dept.</td>
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<tr>
<td>City of Long Beach Health Department</td>
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<td>City of Vernon Health &amp; Environmental Control</td>
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<td>Madera County Environmental Health</td>
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<td>Marin County Environmental Health Services</td>
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<tr>
<td>Merced County Dept. Public Health, Div. Env. Hlth</td>
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<td>Modoc County Environmental Health</td>
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<tr>
<td>Monterey County Health Department</td>
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<td>Orange County Environmental Health</td>
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<tr>
<td>Riverside County Environmental Health Services</td>
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<td>Sacramento County Environmental Health</td>
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</table>
Medical Waste Management Plan

MWMP is a document completed by generators (shippers) of medical waste.

Plan is filed with the enforcement agency, either the State or, where applicable, the Local Enforcement Agency.

State filers can obtain a checklist CDPH Form 8661 for assistance in creating their plans.

LEA filers can check for specific forms from the LEA.
Closed disposable sharps containers

Blood and OPIM

Soaked, dripping bloody dressings

Intact glass or plastic bottles with bloody fluid or OPIM (Some states require them to be placed in a sharps container)

All disposable items soaked or dripping with blood or OPIM
Identifying & Segregating Waste: Items NOT in the RMW Category

**NOT RMW:**
- Chemicals
- RCRA Hazardous waste
- Radioactive waste
- Complete human remains
- Bulk Chemotherapy waste
- Compressed gas cylinders, canisters, inhalers, and aerosol cans
- Any devices or solutions containing mercury or other heavy metals
- Regular office garbage or solid waste

**RMW – But REQUIRES SEGREGATION/INCINERATION**
- Pathological waste
- Trace chemotherapeutic waste
- Pharmaceutical waste (not red bag)
Non RCRA hazardous pharma waste is to be packaged in a pharma, sharps-type container (primary packaging).

Pharma container (typically blue) must then be placed inside a clear bag and into a transport container (secondary packaging).

Pharma waste can NOT go into RMW red bag or into RMW Sharps container.

Outside of pharmaceutical primary container states: “HIGH HEAT OR INCINERATION ONLY.”
Cal-OSHA 5193 d E 3

- Regulated waste shall be disposed of in containers which are closable, labeled, and color-coded.

- Proper packaging requires 3 things:
  1. Lid, or other means of closure
  2. Red Bag
  3. Biohazard labeling on top and four sides

- Applies to containers used for office storage and final transport containers.
Generators (shippers) must properly select sharps containers in order to protect employees during transport.

**Definition of Sharps**

- Needles and syringes
- Scalpel blades and lancets
- Glass pipettes, slides, and tubes
- Broken, contaminated glass
- Staples and wires (cardio-catheter wires)
- Orthodontic wires
- Disposable suture sets and biopsy forceps
- Electrocautery tips (no cauterizers or batteries)
• Healthcare workers should be able to comfortably view the entire inlet opening of the disposal container.

• Containers should be located within arm’s reach.

• Place containers slightly below eye level or on a counter top.
Direct visibility of the inlet opening is necessary.

Containers should be promptly replaced when contents reach manufacturer’s fill line.

Overfilled containers increase the risk of needlestick injuries and violate proper product usage requirements.
Sharps containers must be placed in a secondary container for transport. Alternatively, DOT-approved carts for transport may be used.

Or meet leak proof requirements (gaskets)
Proper Packaging of RMW: Preparing Disposable Containers

To schedule a pickup, log in to myStericycle.com or call 866-783-7423.

Packaging Procedures
For Reusable Containers and Corrugated Boxes

How to Prepare Your Waste Containers for Pickup

1. Corrugated Boxes - Red corrugated boxes with white label. For use on non-scratched surfaces.

2. Line the container and fill with medical waste.

3. Tie a knot.

4. Close the lid.

Regulatory Requirements

GENERAL
- Generators are responsible for packaging their waste.
- Each bag must be hand-tied by gathering and twisting the top of the bag and using a tie or knot to secure the bag, and each container must be securely closed.
- Closed bags must not be visible once secondary container is closed.
- Improperly packaged containers or damaged containers will not be picked up or accepted by the generator.
- Only Regulated Medical Waste can be placed in Stericycle containers.

SHARPS
- Sharp material (“sharps”) must be placed in a puncture-resistant container designed for “sharps” waste. “Sharps” include needles, syringes, broken glass, scalpel, scissors, shavers, safety blades, broken blood glucose strips, broken rigid plastic and exposed edges of sharp waste.
- All sharp containers should be properly closed before being placed into secondary containers.
- No loose sharps are permitted outside of sharp containers.

For more information, contact Stericycle at 866-783-7423.

Order more red bags, boxes, sharps containers, and waste supplies at myStericycle.com.
Proper Packaging of RMW: Preparing Reusable Containers

Tie off red bag

To schedule a pickup, log in to MyStericycle.com or call 866-783-5423.

Stericycle
Packaging Procedures
For Reusable Containers and Corrugated Boxes

How to Prepare Your Waste Container for Pickup

1. Corrugated Boxes: Tie the outside seams securely with tape. Any holes in the seams must be plugged with an impermeable tape or use a bar tack on the seams. The container must be securely closed.

2. Line the container and fill with medical waste.

Tie at breast.

3. Close the lid and seal with tape or bar tack.

Regulatory requirements

GENERAL
- Generators are responsible for packaging their waste.
- Each bag must be sealed by gathering and twisting the neck of the bag and using a tie or band not to exceed the bag and each container must be securely closed.
- Closed bags must not be voidable once secondary container is closed.
- Improper packaging containers or Corrugated containers will be dealt with and returned to the generator.
- Only Regulated Medical Waste can be placed in Stericycle containers.

SHARPS
- Sharp materials (“Sharps”) must be placed in a puncture-resistant container designed for “Sharps” waste. “Sharps” include needles, syringes, broken glass, scalpels, culture dishes, culture tubes, broken glass syringes, broken glass test tubes, broken glass vials, and opened vials of dental waste.
- All sharps containers should be properly sealed before being placed into secondary containers.
- No non-sharps are permitted outside of sharps containers.

For more information, contact Stericycle at (866) 783-5423.

Order more red bags, boxes, sharps containers, and waste supplies at MyStericycle.com.

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CHEMOTHERAPEUTIC WASTE

• Biohazardous waste that is contaminated through contact with, or having previously contained chemotherapeutic agents.

• Must be segregated for storage and placed in a secondary container that is labeled “Chemotherapy Waste,” “CHEMO,” etc.

• Stericycle can only accept “trace chemo,” i.e., less than 3% of original contents.

PATHOLOGICAL WASTE

• Human surgery specimens, or tissues which have been fixed with formaldehyde or other fixatives.

• Must be segregated for storage and placed in a secondary container that is labeled “Pathology Waste,” or “Path,” etc.

LABELING

• Labeling shall be provided on the lid and on the sides and be visible from any lateral direction.
Proper Packaging of RMW: Weight Limitation

The packaged waste must be within the required weight limits.
A non-acceptable container may include any of the following:

- Red Bag not tied
- Leaking container
- Objects protruding
- Improperly closed (includes sharps containers)
- Overfilled
- Not properly labeled/marked

An improperly packaged container should NEVER be offered for transportation.
Storage must be in containers that are leak resistant, have tight fitting covers and are kept clean and in good repair.

Secondary containers must be clearly labeled with appropriate symbols on the top and sides so as to be visible from any lateral direction.

Warning signs – English

• CAUTION – BIOHAZARDOUS WASTE STORAGE AREA – UNAUTHORIZED PERSONS KEEP OUT.

Spanish

• CUIDADO – ZONA DE RESIDUOS BIOLOGICOS – PELIGROSOS PROHIBIDA LA ENTRADA A PERSONAS NO AUTORIZADAS.
## Storage Times in California

### Generator Storage Requirements for These Types of Waste:

<table>
<thead>
<tr>
<th></th>
<th>SHARPS</th>
<th>BIOHAZARDOUS</th>
<th>PHARMACEUTICALS</th>
<th>TRACE CHEMO</th>
<th>PATHOLOGY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>If kept at or above 32 Fahrenheit</strong></td>
<td>30 days max when ready for disposal, full and closed</td>
<td>7 days max (≥20 lbs/mo)</td>
<td>90 days max</td>
<td>7 days max (≥20 lbs/mo)</td>
<td>7 days max (≥20 lbs/mo)</td>
</tr>
<tr>
<td></td>
<td>30 days max (&lt;20 lbs/mo)</td>
<td></td>
<td></td>
<td>30 days max (&lt;20 lbs/mo)</td>
<td>30 days max (&lt;20 lbs/mo)</td>
</tr>
<tr>
<td><strong>If kept below 32 Fahrenheit</strong></td>
<td>90 days max</td>
<td>90 days max</td>
<td>90 days max</td>
<td>90 days max</td>
<td>90 days max</td>
</tr>
<tr>
<td><strong>Labeling Requirement</strong></td>
<td>“Sharps Waste” or international biohazard symbol and the word “BIOHAZARD”</td>
<td>“Biohazardous Waste” or international biohazard symbol and the word “BIOHAZARD”</td>
<td>International biohazard symbol and “HIGH HEAT OR INCINERATION ONLY”</td>
<td>“Chemo” Note: For Sharps Waste contaminated w/Chemo, label as “Chemo” or “Chemotherapy Waste”</td>
<td>“PATH” or “Pathology Waste”</td>
</tr>
<tr>
<td><strong>Notes</strong></td>
<td>Storage time depends on weight of Biohazardous Waste &amp; not weight of Sharps Waste.</td>
<td>Red Biohazard Bag</td>
<td>If container not filled, must be picked up within 1 year</td>
<td>Chemo</td>
<td>Path</td>
</tr>
</tbody>
</table>

According to the 2015 Medical Waste Management Act, Chpt 9: Sections 118275, 118280, and 118285
California MWMA 2015 – requires both Shipping and Tracking Documents to transport RMW
Labeling & Documentation: California State Requirement

Shipper’s Certification:
✓ Properly described
✓ Properly packaged
✓ Properly marked and labeled per US DOT
✓ Agreement as to volumes transported

All boxes, reusable containers, and/or secondary containers prepared for shipment shall be marked with

- A water-resistant tag containing:
- Generator’s (shipper) name and address
- Transporter’s name, address, and permit number
- Date the transporter accepted the RMW

The waste hauler is not authorized to sign the shipping document for the generator (shipper).

3. Generator’s Certification: “I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.”

Printed/Typed Name: [Signature] Date: Phone #: Cu Ft.
DOT Shipping Papers (49 CFR 172.200) Legible, in English

- Proper shipping description:
- Waste identification number – UN 3291
- Name - Regulated Medical Waste, n.o.s.
- Hazard class and division – 6.2
- Packaging Group – PGII
- Total Quantity – cubic feet or weight

DOT

- Requires that all hazardous materials be accompanied by shipping documents (manifests)
- Provide clear communication in event of emergency when hazardous material is in transit
- Critical for documents to be complete, correct, and to have emergency response number (manned 24/7)
- Shipper’s certification (Generator’s Signature)

CDPH

- SQ Generators (shippers) – maintain documents for 2 years
- LQ Generators (shippers) – maintain documents for 3 years
Emergency spill procedures (may include spill kits)

Make sure procedures are consistent with Medical Waste Management Plan

Post a current list of emergency numbers

Be sure to review and update the list annually
DOT Requirements: RMW Container Markings

Actual container graphics may vary
Actual container markings and liner bag color for non RCRA hazardous drug disposal waste may vary depending upon specific location. Use container and liner bag as directed by local Stericycle office performing pickup.
Thank you for your interest in the specific laws governing Regulated Medical Waste in California.

Be sure to also check actual State website for further details and any possible changes to State regulations.

If you have additional specific questions relating to waste segregation or pharmaceutical disposal, please feel free to email Stericycle at DOTQuestion@Stericycle.com