

Understanding
Regulated
Medical Waste &
Best Management
Practices





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#### Regulations & References

The information provided in this presentation is based on the referenced Code of Federal Regulations and State regulations. This data is presented only as a reference. For complete requirements or legal counsel on hazardous waste regulations and interpretations, generators should consult their legal department, the applicable Code of Federal Regulations and applicable State regulatory agencies.



## Presentation Objectives

#### Regulated Medical Waste

- What Agencies Are Involved?
- Who is Responsible at the Facility?
- Defining Regulated Medical Waste (RMW)
- Understanding Classes 1 − 7
  - Identifying These Waste Streams In Your Facility
- Best Management Practices
  - Identification, Training, Tracking
  - Proper Storage and Containment



# Some of the Governing Agencies Involved

















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## Who is Responsible?

"Generator" means any person, by site, whose act or process produces RMW as defined in N.J.A.C. 7:26-3A.6) or whose act first causes a RMW to become subject to regulation.

Noncontiguous Properties Owned or Operated by the Same Person or Entity are Separate Sites and in the case where more than one person (for example, doctors with separate medial practices) are located in the same building and office, each individual business entity is a separate generator for the purposes of this subchapter.

Exceptions include households utilizing home self-care exclusively.

Other Agencies have Requirements Pertaining to Generators of Waste, such as the Department of Transportation.



## Generator Requirements

#### KEY REGULATORY REQUIREMENTS FOR GENERATORS TO KEEP IN MIND:

- Waste Intended for Transport Offsite Must Be Segregated into the Following Categories:
  - 1.Sharps (Classes 4 and 7 as defined at N.J.A.C. 7:26-3A.6(a)) including sharps containing residual fluids;
  - 2. Fluids (quantities greater than 20 cubic centimeters); and
  - 3.Other RMW.
- Waste must be identified by the different classes:
  - Cultures and Stocks
  - Pathological Wastes
  - Human blood and blood products
  - Sharps
  - Animal Waste
  - Isolation waste
  - Unused Sharps



## **Accrediting Agencies**



- Not Regulatory Agencies
- Accrediting Bodies for Healthcare Facilities
- Wide Variety of Requirements
- Crosses all Different Regulatory Agency Requirements



## Regulated Medical Waste

- Red Bag Waste
- Sharps Waste
- Pathology Waste
- Trace Chemotherapy Waste











## OSHA & Regulated Medical Waste



#### OSHA 1910.1030(b)\*

"Regulated Waste means liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; contaminated sharps; and microbiological wastes containing blood or other potentially infectious materials."

"If the blood/body fluid can spill, splash, splatter or drip to get into an existing portal of entry it has the potential to infect."



#### means liquid or semi-liquid blood

- Other potentially infectious materials
- Caked with dried blood
- Microbiological wastes containing blood
- Contaminated sharps (exposed to blood or OPIM)
- Other contaminated items

How do you know if it is a CONTAMINATED ITEM?

It can release blood or OPIM in a liquid or semi-liquid state if compressed

RMW is capable of releasing blood, blood products, and OPIM during handling





### What Exactly is OPIM?



#### OSHA 1910.1030(b)

Other Potentially Infectious Materials (OPIM)

- Any unfixed tissue or organ (other than intact skin) from a human (living or dead)
- Any body fluid that is visibly contaminated with blood
- All body fluids in situations where it is difficult or impossible to differentiate between body fluids

#### Others include:

Cerebrospinal fluid

■Amniotic fluid

■ Pleural fluid

Semen

Pericardial fluid

■Vaginal secretions

Peritoneal fluid

Saliva in dental procedures

Universal Precautions is an approach to infection control where all human blood and certain human body fluids are treated as if known to be infectious

RMW is capable of releasing blood, blood products, and OPIM during handling

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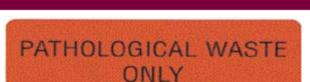


## Is This Regulated Medical Waste?





### Pathological Waste / Class 2



### What is Pathological Waste?

- Human or Animal Body Parts
- Organ Tissue
- Surgical Specimens

## Pathological Waste Must Be Incinerated in New Jersey

What About Pathological Specimens in Formalin or Other Chemicals?

Formalin and Other Chemicals Must be Decanted if Shipping as Medical Waste!

**INCINERATE ONLY** 



### Chemotherapeutic Waste

## **Chemotherapy** is a Treatment that Uses Chemical Agents (Medication) to Destroy and Kill Cancer Cells

The EPA Classifies these Agents as Hazardous. Some Common Examples Include:

- Leukeran
- Mitomycin
- Methotrexate





#### What is Trace Chemo?



What is **Trace**?

3% or Less of the Total Volume By Weight of the Container

#### Examples Include:

- Gowns
- Gloves
- Masks
- Barriers
- Needles and Syringes
- IV Tubing
- Empty bags, bottles, and drug vials





### What is Bulk Chemo?

### What type of Chemo Waste is Hazardous (Not Trace)?

Bulk – More than Residual (More than 3%) of Original Volume

Examples of **Bulk** Items Include:

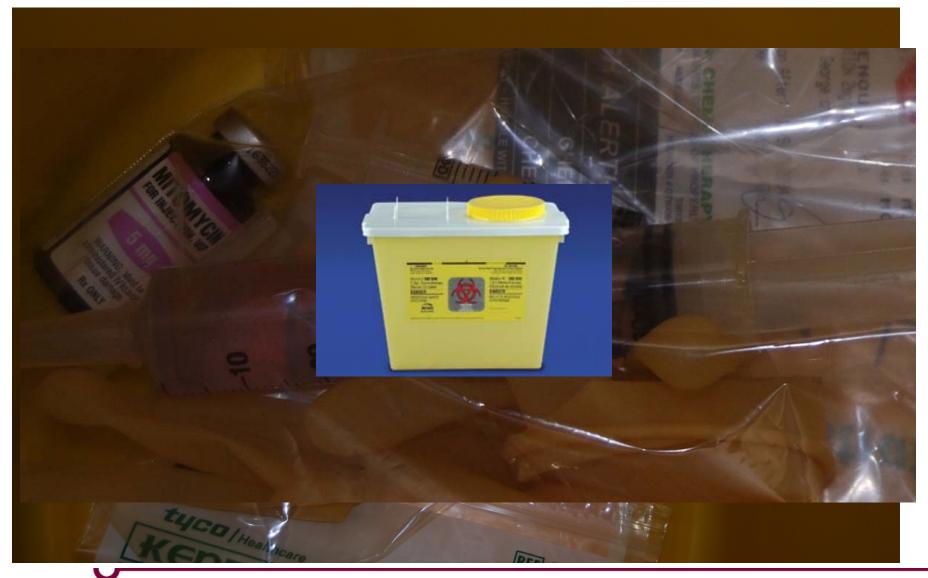
- Saturated PPE
- Needles and Syringes with Partial Chemo
- Partial Bags, Bottles, Pills, and Drug Vials
- Chemo Spill Clean Up
- Hood Filters





## Bulk or Trace?







## What Is Human Blood and Blood Products / Class 3?



- Liquid Waste Human Blood
- Blood
- Saturated and/or Dripping with Human Blood or Caked
   Serum, Plasma, Other Blood Components & Their Containers, which were Intended for Use in either Patient Care, Testing and Lab Analysis or Development of Pharmaceuticals
- ■IV Bags (In Contact with Blood or OPIM)
- ■Soft Plastic Pipettes
- Plastic Blood Vials







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#### What Are Isolation Wastes / Class 6?

Biological Waste and Discarded
Materials <u>Contaminated with Blood</u>,
<u>Excretion</u>, <u>Exudates</u>, or <u>Secretions</u>
from Humans who are Isolated to
Protect Others From Certain Highly
Communicable Diseases, or <u>Isolated</u>
<u>Animals Known to be Infected</u> with
Highly Communicable Diseases





## What Are Sharps / Class 4?

#### Per the NJDEP, Sharps Include but Are Not Limited To:

- Needles
- Syringes to which a Needles Can Be Attached & Their Components
- Scalpels Blades
- ■Pasteur Pipettes
- Slides
- Blood Vials
- Carpules
- Needles with Attached Tubing
- Culture Dishes (Regardless of Presence of Infectious Agents)
- Lab Glassware in Contact with Infectious Agents





## Sharps & Class 7 Waste



Unused, Discarded Sharps, That Were Intended to be Used:

- Hypodermic Needles
- Suture Needles
- Syringes
- Scalpel Blades





## Are All Syringes Sharps?

### **Department Of Transportation**

49CFR173.134(a)(6) Sharps means any object contaminated with a pathogen or that may become contaminated with a pathogen through handling or during transportation and also capable of cutting or penetrating skin or a packaging material.

Sharps includes needles, <u>syringes</u>, scalpels, broken glass, culture slides, culture dishes, broken capillary tubes, broken rigid plastic, and exposed ends of dental wires.



## Are All Syringes Sharps?

#### **EPA**

40 CFR 173.134, sharps is defined as "to mean any object that may have been contaminated with an infectious substance, and is able to cut or penetrate the skin or packaging material.

The term includes needles, <u>syringes</u>, scalpels, broken glass, culture slides, culture dishes, broken capillary tubes, broken rigid plastic, and exposed ends of dental wires. In response to comments, we have the definition proposed in the NPRM to include uncontaminated objects that may become contaminated during handling and transportation."

For more information from the EPA regarding this topic, please refer to <a href="http://www.epa.gov/EPA-WASTE/2002/August/Day-14/f20118.htm">http://www.epa.gov/EPA-WASTE/2002/August/Day-14/f20118.htm</a>

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### Cultures & Stocks / Class 1

## Cultures and Stocks of Infectious Agents & Associated Biologicals, Including:

- Cultures & Stocks of Infectious Agents from Research and Industrial Labs
- Wastes from the Production of Biologicals
- Discarded Live and Attenuated Vaccines
- Culture Dishes and Devices Used to Transfer, Inoculate, and Mix Cultures







### Animal Wastes / Class 5

Contaminated Animal Carcasses, Body Parts, & Bedding of Animals that are Known to Have Been Exposed to Infectious Agents

- During Research
- Production of Biologicals
- Testing of Pharmaceuticals

Carcasses that are Not Known to Have Been Exposed to Agents Infectious to Humans are Not Included in This Class



# Are These Items Regulated Medical Waste?





В



C



D





H



G



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### How Do We Dispose of....



A. Syringe with no needle



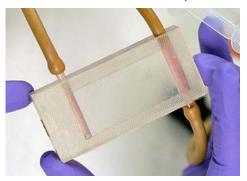
B. Syringe with a needle



C. Paper Towels with Alcohol Solution (no path waste)



D. Lab glassware (slides – with and without tissue)



E. Plastic weigh boats

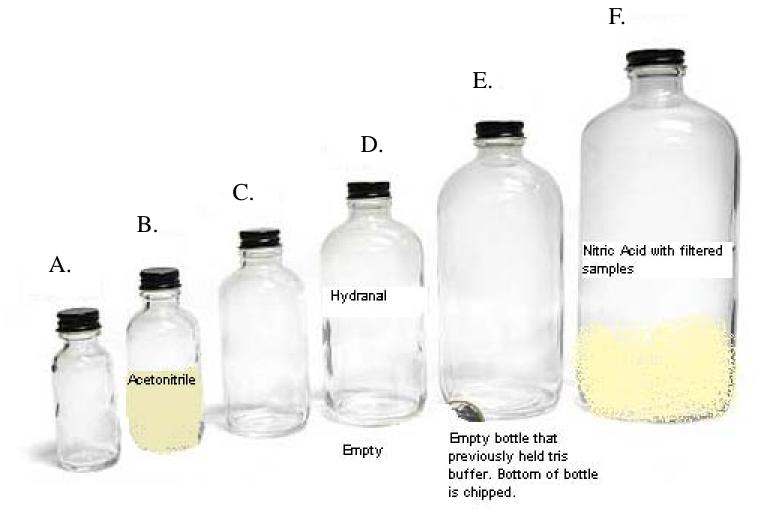


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## How Do We Dispose of....







## Segregation of Waste



**Regulatory Fines** – Fines can ranges from the hundreds of

dollars into the many thousands of dollars.

Safety – Friends don't let friends commingle

ST0P

different waste streams. Commingling different waste streams can lead to accidents, injuries, chemical reactions, and even regulatory fines.



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### **Proper Segregation?**



7:26-3A.10 **Segregation Requirements** If other non-regulated medical waste and/or solid waste is placed in the same container(s) as regulated medical waste, or if regulated medical waste cannot be initially segregated from other solid waste, then the generator shall package, label, and mark the container(s) and manage its entire contents according to the requirements for medical waste in this subchapter.

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# Best Management Practices: Storage & Packaging



#### KEY REGULATORY REQUIREMENTS FOR GENERATORS TO KEEP IN MIND:

Storage: Non-putrescent, Secured, Limited Access,
 1 Year Maximum Storage



- Packaging Labeling Requirements:
  - Water-resistant Label Affixed to or Printed on the Outside of the Container
     The Label Shall Include the Words "Medical Waste," or "Infectious Waste," or Display the Universal Biohazard Symbol
  - Inner Liner & Generator Information
  - Specific Packaging Requirements and Container Specification





# Best Management Practices: Proper Syringe Containment



#### Sharps Containers - OSHA 29CFR 1910.1030(d)(4)(iii)(A)

Contaminated Sharps Discarding and Containment.

Contaminated sharps shall be discarded immediately or as soon as feasible in containers that are:

- •Closable;
- Puncture resistant;
- Leakproof on sides and bottom; and
- •Labeled or color-coded in accordance with paragraph (g)(1)(i) of this standard.

#### During use, containers for contaminated sharps shall be:

- •Easily accessible to personnel and located as close as is feasible to the immediate area where sharps are used or can be reasonably anticipated to be found (e.g., laundries);
- •Maintained upright throughout use; and
- Replaced routinely and not be allowed to overfill.



When moving containers of contaminated sharps from the area of use, the containers shall be: Closed immediately prior to removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport, or shipping;



# Best Management Practices: Proper Packaging & Storage?















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## Best Management Practices: Manifests



#### KEY REGULATORY REQUIREMENTS FOR GENERATORS TO KEEP IN MIND:

- Tracking Waste:
  - Each Generator Shipping RMW Off-site is Responsible for Initiating the New Jersey RMW Tracking Form
  - All Medical Waste Generators, Regardless of Volume, With the Exception of Home Self-care Medical Waste, Must Register with the NJDEP and Pay the Appropriate Fees (N.J.A.C. 7:26-3A.8(a))
  - Generators are Responsible for Maintaining All Shipping Records for 3 Years
  - Generators Should Contact Their Transporter if Documentation Not Returned Within 35 Days and Notify NJDEP if Not Returned Within 45 days
  - Annual Report Requirements



- Identify the Types of Hazardous Materials from All Departments and Potential Wastes
- Who/What Departments –
   Compartmentalize Identification of Needs
- What Types of Employees are Affected
  - Training Needs
  - Minimum Standards



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#### Once All Waste is Identified:

- What Waste Minimization is Possible?
  - How to Best to Implement Waste Minimization and Sustain It?
- What Resources are Needed?
- What Training is Needed and for Who?
- Who are the Best Companies to Work with to Help You Keep Compliant?
- How Best to Work with Local Regulators?



- Create a Plan
- Look at Overlapping Regulations and Consolidate
- Create a Compliance Calendar
  - Ensures Proper Recordkeeping
- Rounding
- Create Checklists
  - Audit Against Checklists
  - Update Lists as Conditions Change





### Specialize Employee Jobs if Possible

- Minimizes Exposure to Employees
- Minimizes Regulatory/Training/Recordkeeping Requirements
- Better Control of Environment
- Reduce Liability





## Best Management Practices: Handling



### Regular Training on Hazards and Proper Handling

- Minimizes Exposure to Employees
- No Eating or Drinking Unless in Break Areas
- Only Used Approved Lotions
- Hold Waste Away from Your Body
- Do Not Compress Bags or Containers with Your Hands







#### Conclusion



#### **Regulated Medical Waste**

- Numerous Agencies Involved
- Generators are Responsible from Cradle to Grave of the Waste
- NJDEP Classifies Medical Waste into 7 Different Classes but Keep in Mind Other Agencies Requirements May Come into Play
- Identify These Waste Streams In Your Facility to Improve Compliance





THANK YOU!!!!

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