



**RED,
WHITE, BLUE**
and Found All Over Your
ASC

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Medical Waste

RED 

WHITE 

BLUE 



Objectives

- Describe the different types of medical waste in an ASC
- Denote the entities defined as regulated medical waste (RMW)
- List the DOT criteria for education of staff who handle RMW
- Define the packaging, labeling, and transporting of RMW as defined by DOT



Regular Waste

- Follow local Fire Code (NFPA)
- Less than 32 gal in patient care areas; includes linen
- No limit in proper "Hazard Location" for storage
- Receptacle must be "fire resistant"



Recycling Waste

- Manage as regular waste
- Can attract insects and varmints



Pharmaceutical Waste Disposal "Black Box Waste"

- Limits the amount of pharmaceutical waste that enters landfill and waterways
- Reusable black plastic boxes stored in key patient care areas
- Maintain boxes like sharp containers
- Place all vials, syringes, pills, etc. into boxes, including empty containers

Exception: DEA controlled meds must still be wasted into the sewer system

Special Handling Waste

- Chemicals waste
- Radioactive waste
- Complete human remains
- Bulk chemotherapy waste
- Compressed gas cylinders, canister, inhalers, and aerosol cans
- Any devices or solutions containing mercury or other heavy metals

Regulated Medical Waste Guidelines/Regulations



- CDC
- OSHA
- DOT
- Local regulations



United States
Department of Transportation

Definitions

RMW

- A waste or reusable material generated in:
 - diagnosis, treatment, or immunization of human beings or animals
 - research pertaining to diagnosis, treatment, immunization production, or testing of biological products
- RMW is also called red-bag waste

Regulated Medical Waste



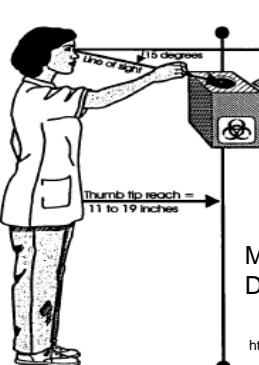
- **Dripping with body fluid**
- **Squishing with body fluid**
- **Caked with body fluid**
- **Contaminated sharps**

OSHA's Bloodborne Pathogen Standard CFR: 1910.1030



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

- Closable
- Puncture resistant
- Leak-proof on sides and bottom
- Labeled or color-coded



Mounting of Sharp Disposal Container

Eye level = 57 inches

An ideal standing installation height for a fixed sharps disposal container is 52 to 56 inches. This height will comfortably accommodate 95% of all adult female workers.

<http://www.cdc.gov/niosh/pdfs/97-111.pdf>

OR Fluid Waste Management

- Written plan
- Wear PPE during disposal
- Follow OSHA regulations for handling, storage, and properly labeled
- Document education of staff
- Types
 - Create dam and suction
 - Suction canister to solid mass
 - Suction directly to disposal

OSHA's Bloodborne Pathogen Standard CFR: 1910.1030

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
- Placed in a secondary container if leakage is possible

OSHA's Bloodborne Pathogen Standard CFR: 1910.1030

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
- Replaced routinely and not be allowed to overfill



DOT

- The United States Department of Transportation (DOT) regulates the packaging and shipping of hazardous materials
- These regulations are found in the Code of Federal Regulations (CFR) Title 49 Subchapter C Parts 171 – 180



DOT Required Training

- **Awareness Training**
 - Anyone in your facility who deals with RMW
- **Function-Specific Training**
 - Storage and dock maintenance employees
 - Employees who sign medical waste manifests
- Training must be documented on an annual basis



As a generator of Regulated Medical Waste (RMW), facilities have a responsibility to:

- Classify, package, and label RMW
- Ensure that all RMW is prepared for transport to the treatment center in accordance with current DOT regulations

Definitions

RMW generated in a healthcare facility may consist of:

- Liquid or semi-liquid blood or other potential infectious materials
- Contaminated items that would release blood or other potentially infectious materials when under pressure, such as gauze dripping with blood
- Items caked with blood or body fluids
- Contaminated sharps
- Contaminated laboratory waste (including microbiology cultures and stocks)

Definitions

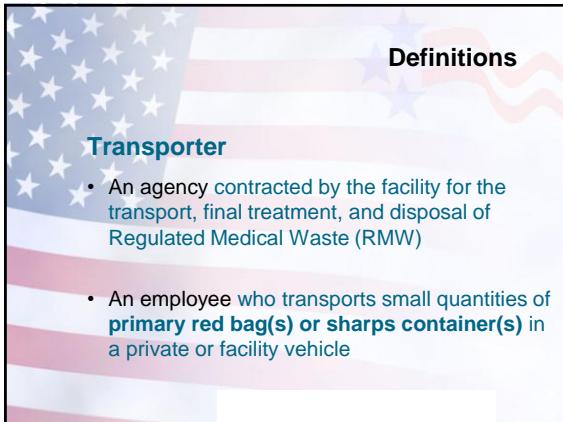
Infectious Substance

- Materials known or suspected to contain a *bacteria/virus pathogen* with the potential to cause disease upon exposure
- An object that may be contaminated with any blood, body fluids, or microorganisms

Definitions

Sharps

- Any object able to cut or penetrate the skin or packaging material
 - This includes
 - Needles, syringes, scalpels
 - Broken glass, glass slides, culture dishes
 - Broken capillary tubes
 - Broken ridged plastic
 - Exposed ends of wires



Definitions

Transporter

- An agency contracted by the facility for the transport, final treatment, and disposal of Regulated Medical Waste (RMW)
- An employee who transports small quantities of **primary red bag(s) or sharps container(s)** in a private or facility vehicle



Definitions

Generator

- An agency that generates Regulated Medical Waste (RMW), in this case our facility
- An employee who certifies that the final packaging of RMW meets international and national government regulations - the person who signs the shipping manifest
- All generators must successfully complete annual training on RMW before they can sign the manifest



Definitions

Shipping Manifest

This information is **REQUIRED** on all Regulated Medical Waste (RMW) shipping manifests

- Hazard Class: 6.2 identifies the shipment as infectious substances
- Identification Number: UN3291 is the ID number for RMW
- Packing Group: PG II is code for "Medium Danger"

Packaging the Waste



BIOHAZARD

- Infectious and non-infectious waste should be separated at the point of generation
- Solid or semi-solid wastes are placed in red plastic bags that are tear resistant and labeled with the universal biohazard label
- Do not place sharps, sharp items, or items with sharp corners in the bags
- Keep bags from coming into contact with sharp external objects

Packaging Containers

- Primary
- Secondary
- Final (may be secondary)

**Packaging-
Primary Containers**

Primary Container examples:

- Red biohazard bags
- Sharps containers






Rabbit ear tie



gooseneck knot

Packaging- Primary Containers

Red Biohazard Bag

- Must be closed tightly with either a rabbit ear tie or a gooseneck knot
- Make sure there is no leakage
- Never place on the floor
- Place in a **lined and lidded** secondary container marked with biohazard label
- Place in a **secure** non-public designated storage area



Overfilled

Packaging- Primary Containers

Sharps Container

- Close when 3/4 full
- Secure and lock container opening to prevent spillage or reuse
- Who is responsible for changing the container?
 - Primary healthcare professionals
 - Environmental Services



Packaging- Primary Containers

Never put primary containers of Regulated Medical Waste (RMW) with regular trash

- This contaminates the regular trash
- It must be discarded as RMW after contamination

Packaging- Secondary Containers

- A **secondary container** may be used to collect primary containers
- Secondary containers **must be**:
 - **Lined and lidded**
 - **Marked with a biohazard label**
 - **Kept in a secure, non-public designated storage area**
- The secondary container may become the final transport container

Packaging- Final Transport Container

Final Transport Container

- Rigid and leak resistant
- Moisture resistant
- Clean on the exterior
- Unable to tear or break open under normal use
- **Lidded**
 - Be sure to press the lid center to seal the lid and prevent leakage
- Puncture resistant for sharps
 - Cannot be used as a primary sharps container

Packaging- Final Transport Container

Final Transport

Container must be marked **externally** with the words:

Regulated Medical
Waste
UN3291



Biohazard



Preparing the Final Transport Container

- Inspect for cracks, holes, or other damage
- If damage is present:
 - **Do not** use container
 - Make arrangements to return the damaged container to transporter

Preparing the Final Transport Container

Open a large red bag and line the inside of the transport container



Preparing the Final Transport Container



- Place red bags (rabbit ear tied or gooseneck knotted) and/or closed sharps containers in the red liner bag
- Do not overfill

Preparing the Final Transport Container



Close red liner bag with gooseneck knot or plastic tie

- No objects should protrude from red liner bag
- There should be no visible leakage

Preparing the Final Transport Container



- Place lid on container
- Press on lid center to seal and prevent leakage

Transport Labels



Write your initials & the date you packaged the container appropriately

Affix the label to the side of the container



Preparing the Final Transport Container

- Place barcode label (provided by the vendor transporter) on container to the right of the handle
- Store all RMW in an area that is **secure** and **RESTRICTED** from public access



Transportation

- Contract with a vendor for the transport, final treatment, and disposal of regulated medical waste
- The vendor supplies the final transport containers, red liner bags, barcode labels, and preprinted manifest
- Pick up of regulated medical waste is scheduled based upon the amount of waste generated



Manifest

The purpose of the manifest is to provide clear communication:

- In the event of an emergency
- While the hazardous material is being transported
- When documenting final destruction of the waste

• The original manifest is kept by the pick up driver

• It becomes the “Proof of Destruction” document after final destruction of the waste by the vendor

Manifest Reconciliation

Original signature at pick up

Autoclave or Incinerator

Location and date



- Vendor will provide a "Proof of Destruction" manifest at each point of shipment
- The "Proof of Destruction" shows when, where, and how RMW is sterilized and or destroyed
 - by Autoclave, or
 - by Incinerator

Manifest

The manifest must contain the following:

- Proper shipping name - Regulated Medical Waste
- Hazard class - 6.2
- Identification number - UN3291
- Packing Group: PG II
- The DOT exemption number of package (if applicable)
- Quantity of material shipped - weight or volume
- Emergency Response phone number of the vendor transporter - must be manned 24 / 7
- Generator's certification statement - see next page
- Printed name and signature of employee shipping the waste

Manifest

Generator's Certification

Under penalty of criminal and civil prosecution for the making or submission of false statements, representations, or omissions, "I hereby declare that the contents of this consignment are fully and accurately described below by the proper shipping name, and are labeled/placarded, and are in all respects in proper condition to transport according to the applicable international and national government regulations."

printed name signature date

Manifest

- It is OUR RESPONSIBILITY as the generator to make sure that the RMW is packaged correctly
- THE EMPLOYEE WHO SIGNS the manifest is promising that the waste is packaged correctly
- Copy of the manifest is kept at POINT OF ORIGIN
- The generator of the waste is liable for any fines that may be incurred for not following regulations

Manifest Reconciliation

- It is our responsibility to ensure that the RMW is actually destroyed by the vendor
- This is done through reconciliation - the matching of the copy of the manifest with the “Proof of Destruction” copy provided by the vendor

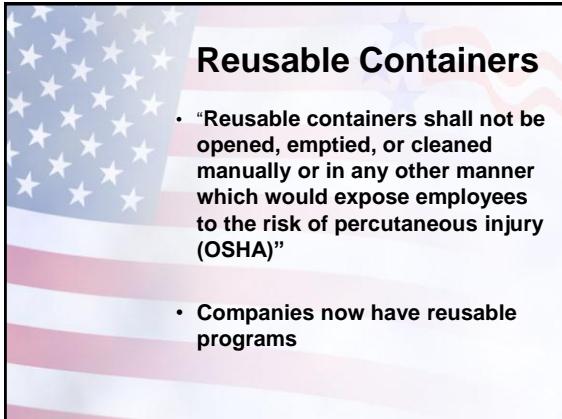
Manifest Retention

- Reconciled manifests are kept for 3 years
- Reconciled manifests must be kept at the POINT OF ORIGIN



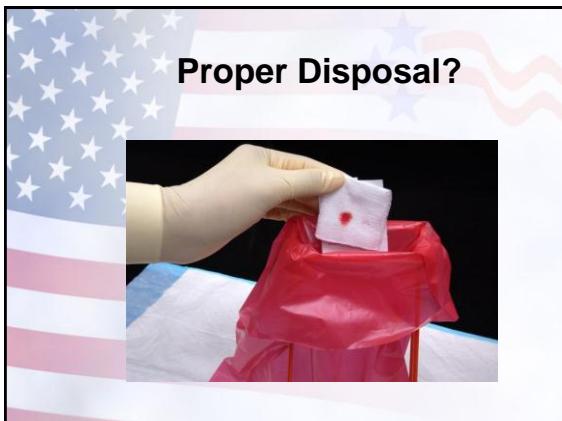
Shipping Document

- A receipt- like shipping document is printed by the Transporter and given to a building representative:
 - Anyone who has taken this training is authorized to sign the receipt
- This document attests that the waste was properly packaged, labeled, and transported for waste disposal
- It holds the facility responsible for any waste disposal violations



Reusable Containers

- “Reusable containers shall not be opened, emptied, or cleaned manually or in any other manner which would expose employees to the risk of percutaneous injury (OSHA)”
- Companies now have reusable programs



Proper Disposal?



Proper Disposal?



Proper Disposal?



Proper Disposal?



