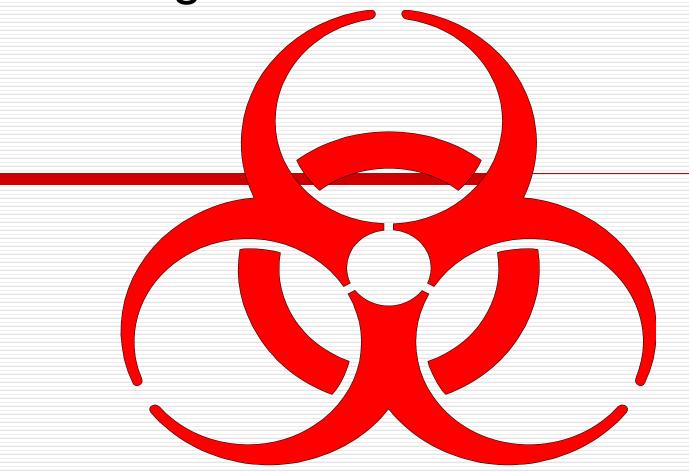
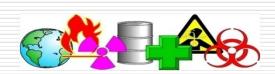
Regulated Medical Waste



Be sure to sign in!





State University of New York

Waste Management Training

You must receive this training if you:

- Add regulated medical waste into an accumulation container
- Determine if a material is regulated medical waste
- Transport regulated medical waste
- Inspect regulated medical waste storage areas
- Autoclave or regularly deactivate/disinfect regulated medical waste
- Respond to spills involving regulated medical waste

What are we going to talk about?

Regulatory Overview

waste

- Define Regulated Medical Waste and discuss how to properly handle it
- Recognize hazards of biological wastes
- Learn how to safely manage biological waste material and sharps
- Learn what actions to take in an emergency or spill involving biological

Where did this all begin?





How did we get here?



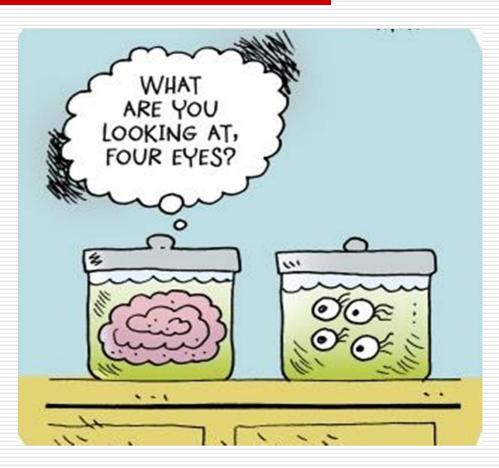


What does the future hold?





What is Regulated Medical Waste?





Regulated Medical Waste (RMW)

The General Definition of

Regulated Medical Waste is:

"Any solid waste generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals."



OSHA's definition of RMW

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

Regulated Medical Waste

- So, what is Other Potentially Infectious Materials?:
- OPIM refers to any bodily fluid identified as potentially capable of transmitting a communicable disease.





Examples of such bodily fluids

- Cerebrospinal fluid
- Synovial fluid
- Pleural fluid
- Pericardial fluid
- Peritoneal fluid
- Amniotic fluid
- Biological materials in labs (etiologic)

- Saliva in dental procedures
- Any body fluid visibly contaminated with blood
- Unfixed human tissue or organ
- Semen



Regulated Medical Waste (RMW)

Six (6) subcategories exist within the general definitions of regulated medical waste. The last (sixth) subcategory provides for the Commissioner of Health to designate specific items which previously have not been considered as regulated medical waste. As no items have yet to be added to this subcategory, the remaining five are considered to be part of the current working definitions of regulated medical waste.



Subcategory 1 - Cultures and **Stocks**

"This waste shall include cultures and stocks of agents infectious to humans, and associated biologicals, cultures from medical or pathological laboratories, cultures and stocks of infectious agents from research and industrial laboratories, wastes from the production of biologicals, discarded live or attenuated vaccines, or culture dishes and devices used to transfer, inoculate or mix cultures."



Subcategory 2 - Human Pathological Wastes

"This waste shall include tissue, organs, and body parts (except teeth and the contiguous structures of bone and gum), body fluids that are removed during surgery, autopsy, or other medical procedures, or specimens of body fluids and their containers, and discarded material saturated with such body fluids other than urine. This waste shall not include urine or fecal materials submitted for other than diagnosis of infectious diseases."



Subcategory 3 - Human Blood and Blood Products

"This waste shall include: (I) discarded waste human blood, discarded blood components (e.g. serum and plasma), containers with free flowing blood or blood components or discarded saturated material containing free flowing blood or blood components; and (II) materials saturated with blood or blood products."



Subcategory 4 - Sharps

"This waste shall include but not be limited to discarded unused sharps and sharps used in animal or human patient care, medical research, or clinical or pharmaceutical laboratories, hypodermic, intravenous, or other medical needles, hypodermic or intravenous syringes to which a needle or other sharp is still attached, Pasteur pipettes, scalpel blades, or blood vials. This waste shall include, but not be limited to, other types of broken or unbroken glass (including slides and cover slips) in contact with infectious agents. This waste shall not include those parts of syringes from which sharps are specifically designed to be easily removed and from which sharps have actually been removed, and which are intended for recycling or other disposal, so long as such syringes have not come in contact with infectious agents."



Subcategory 5 - Animal Waste

"This waste shall mean discarded materials including carcasses, body parts, body fluids, blood, or bedding originating from animals known to be contaminated with infectious agents (i.e. zoonotic organisms) or from animals inoculated during research, production of biologicals, or pharmaceutical testing with infectious agents."



Handling RMW Safely

- To reduce exposures by contact:
 - Keep hands away from mouth, nose, eyes, face
 - Wash hands immediately after contact or when work is completed



Handling RMW Safely

- > To reduce exposures by contact:
 - Decontaminate work surfaces immediately after spills and after work
 - Wear appropriate PPE
 - Do not smoke, eat, drink or store food in work areas







What are the 4 routes of exposure?

- Absorption
- Ingestion
- Inhalation
- Injection



Handling RMW Safely

- Packaging
- RMW must be packaged in a closed red bag, tied and placed into a sturdy cardboard box or fiber drum
- Waste that has the potential to leak must be double bagged



Handling RMW Safely

- Packaging RMW Boxes
 - Must have the word "BIO-HAZARD"
 - Must be sealed with tape
 - Should have the name of the Generator on each bag

BIO-HAZARD

- Containers must be kept closed when not in use (i.e. flap fold)
- There must be a bar-code affixed to the outside of each box or container (prior to ultimate disposal)

This is why each bag should be labeled.....





Sharps

□ It is estimated that 600,000 to 800,000 people suffer the trauma of a sharps injury each year

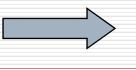




Handling Sharps Waste Safely

- Sharps containers must be puncture resistant, leak proof on the sides and bottom, properly labeled and closable.
- Each sharps container must either be labeled with the universal biohazard symbol and the word "biohazard" or be color-coded red.
- Sharps containers must be maintained upright throughout use, replaced routinely, and not be allowed to overfill.





Handling Sharps Waste Safely (cont.)

- Closable, and, at a minimum, 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
- Constructed to contain all contents and prevent leakage during handling, storage, transport, or shipping



Handling Sharps Waste Safely (cont.)

- Reusable containers must not be opened, emptied, or cleaned manually or in any other manner that would expose employees to the risk of percutaneous injury
- Upon closure, clear packing tape may be used to secure the lid of a sharps container, as long as the tape does not serve as the lid itself
- Sharps containers must be easily accessible to employees and located as close as feasible to the immediate area where sharps are used



Handling Sharps Safely

- To reduce injuries from sharps:
 - Keep sharp objects in view
 - Use appropriate gloves to prevent cuts, punctures and skin exposure





Transporting RMW Safely

During RMW Transport from lab to lab or lab to disposal/pickup location, have spill clean-up material and Personal Protective Equipment (PPE) available or, at minimum, know where it is (i.e. absorbent pads, bleach solution, gloves, etc.).





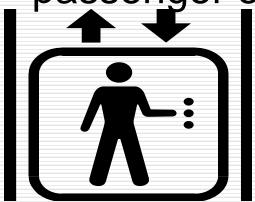


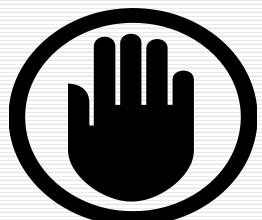




Transportation of RMW

- During Transport
 - Use the freight elevator whenever possible or limit access to a passenger elevator







Waste Handling Practices

RMW Transport

When lifting boxes, support them

from underneath





Disposal of RMW

- Bring RMW to designated locations and/or submit a work order through the Physical Plant work order system.
- Once in the work order system, select "Moving & Trucking" from the <u>category</u> drop down feature, and then choose "Waste/Hazardous Materials" from the <u>subcategory</u> drop down menu.
- IMPORTANT! You MUST COPY the EH&S Officer on ALL work order requests involving regulated medical waste! Scroll down to the bottom of the work order you're creating and enter jeff.carter@farmingdale.edu in the "E-mail Id(s) To Notify" field.
- RMW must never be left on loading docks, freight elevator lobbies or any unrestricted location.

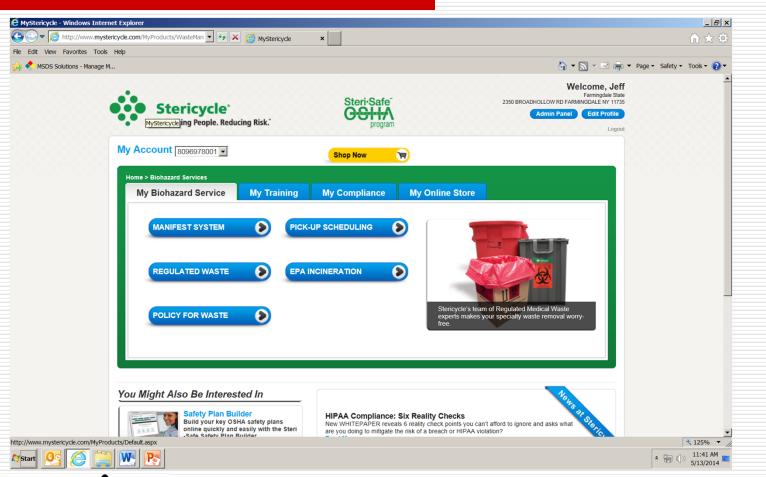


RMW Facility Disposal

- RMW is collected by trained Physical Plant personnel under the supervision of EH&S and stored in a central location until it is picked up for proper disposal by the current RMW disposal contractor.
- RMW is loaded onto a licensed and permitted truck before it is brought to an incineration facility.









Disposal of Empty Containers

Under no circumstances may a container labeled with the words

"infectious", "sharps" and/or "regulated medical waste" or labeled with the biohazard symbol be disposed of in the regular trash.





Personal Contamination



- Assist victim with first aid (if trained)
- Always seek prompt medical attention; call:
 - University Police: 911 or x2111 from a Campus Phone
 - University Police: (631) 420-2111 from a Cell Phone
- File an incident report with your Department within 24 hours
- Specific OSHA paperwork is required following a BBP exposure incident



First Aid

- Splash to the Eyes:
 - Immediately flush with copious amounts of water for at least
 15 minutes
- Splash to the Body:
 - Remove contaminated clothing
 - Immediately flush with copious amounts of water for at least 15 minutes





Emergency Eyewashes

Squeeze handle to operate; located at most sinks





Emergency Showers

- Pull handle to operate
- Located in hallways





- You may clean-up small spills if you:
 - Have the supplies to absorb and bag the spilled material
 - Are familiar with the properties of the spilled materials
 - Have the proper personal protective equipment



- Decontamination use bleach, diluted to 1:10 with water:
 - to decontaminate the spill area
 - to clean/decontaminate equipment used in spill response



- Cover spilled area with absorbent pad or paper towels
- Pour diluted bleach over towels, let stand for 30 minutes





- To reduce the number of employees at risk of exposure:
 - Restrict access to the work area
 - Provide warnings of hazards and advice about special requirements





Emergency Condition

- Any <u>Spill</u>, <u>Leak</u>, <u>Fire</u> or other uncontrolled release that presents a hazard to human health or the environment
- Any person discovering an imminent or actual emergency which is not readily controllable with equipment on hand, must contact University Police (911 or 420-2111)



Emergency Procedures

- If there is a fire involved, immediately pull the fire alarm & begin evacuation
 - Contact University Police from a safe area to notify them of the fire and spill so that

Emergency Response personnel can be dispatched.





Emergency Procedures

- The following information must be provided to University Police:
 - Your name, phone number, and Department
 - The location of the spill
 - Time of the spill
 - Identity of what spilled
 - Quantity of spilled material
 - Extent of injuries, if any





Emergency Procedures

- Notify others in the area about the spill and post a warning sign if time/conditions allow
- If the spill or leak of hazardous material may affect others outside of the immediate area, evacuate the area or pull the fire alarm to notify everyone and begin a larger evacuation



Waste Minimization

- **≻**Source Reduction
 - Do not mix RMW with regular trash (otherwise the whole load becomes RMW)



- Waste Minimization is Pollution Prevention
 - Pollution Prevention not only helps everyone's bottom line, but it also helps protect the environment



Best Management Practices (BMPs)

- Housekeeping
 - All work areas, benches and floors must be clean, dry & uncluttered
 - Do not block emergency equipment
 - Working alone should be avoided
 - Undergraduates should never work alone



CONGRATULATIONS!!!

You have successfully completed Regulated Medical Waste Management Training!

