

Biomedical Waste Management

Management of Biomedical Waste 2024

In accordance with Section 381.0098, Florida Statutes and Chapter 64E-16, Florida Administrative Code



Biomedical Waste Management

Biomedical Waste Management at Baptist Health Care



Sometimes signage is not correct

Definition of Clear Garbage

Items not dripping or saturated with blood and/or body fluids can be disposed of in regular trash bags.

Examples include:

- Dressings
- **Gloves**
- Drapes
- **IV Bags, Tubing**
- Food Waste
- **Urine Containers**
- **Glass Slides**
- Feminine Hygiene Products
- **Empty Suction Canisters**
- **Foley Catheters, Drainage, Tubing, Bags**
- Band-Aids
- Diapers

Biomedical Waste Management

Biomedical Waste Law and Rules

- ✓ Section 381.0098, Florida Statutes (FS)
- ✓ Chapter 64E-16, Florida Administrative Code (FAC)

Onsite

- ✓ Segregation
- ✓ Packaging
- ✓ Storage
- ✓ Transfer
- ✓ Treatment (other than incineration)

Offsite

- ✓ Transport
- ✓ Storage
- ✓ Treatment (other than incineration)

Following OSHA Standards Are Sufficient—Right?

OSHA – Occupational Safety and Health Administration

Implements work practice controls to protect the employee

- 29 CFR 1910.1030 - Bloodborne Pathogen Standard
Occupational exposure to bloodborne pathogens and other potentially infectious materials.

Exposure Control Plan

- 29 CFR 1910.1200 - Hazard Communication Standard
Occupational exposure to chemicals in the work place.
Ensures that information concerning the classification of chemicals is passed down from employer to employee.

Hazard Communication Plan

Biomedical Waste Management

DOH vs. OSHA

DOH

Regulations encompass all aspects of the management of biomedical waste to ensure protection of the public health.

OSHA

Regulations ensure that the employer implements necessary work practices to protect the employee.

These regulations touch on biomedical waste, but not as detailed as DOH regulations.

What is Biomedical Waste?

Any solid or liquid waste which may present a threat of infection to humans, including:

- ☑ **Human or Primate**
 - Non liquid tissue and body parts
 - Blood and blood products
 - whole blood
 - plasma
 - serum
 - cells & platelets



Biomedical Waste Management

What is Biomedical Waste?

Body Fluids

Which have the potential to harbor pathogens such as HIV and HBV

- semen
- vaginal
- lymph
- peritoneal
- synovial
- pericardial
- amniotic
- pleural
- cerebrospinal

Secretions and Excretions

Visibly contaminated with blood

- urine
- feces
- sweat
- vomitus
- saliva
- tears
- nasal discharges

Biomedical Waste Management

What is Biomedical Waste?

Includes:

- ☑ Used, absorbent materials saturated with blood, blood products, body fluids, or excretions or secretions contaminated with visible blood, and absorbent materials saturated with blood or blood products that have dried.
- ☑ Non-absorbent, disposable devices that have been contaminated with blood, body fluids or secretions or excretions visibly contaminated with blood, but have not been treated by an approved method.

Items either saturated (absorbent) or contaminated (nonabsorbent) with blood or a managed body fluid...

- ☑ Saturated cotton ball or gauze pad
 - Blood soaked cotton ball
 - Saliva soaked gauze roll tainted with blood

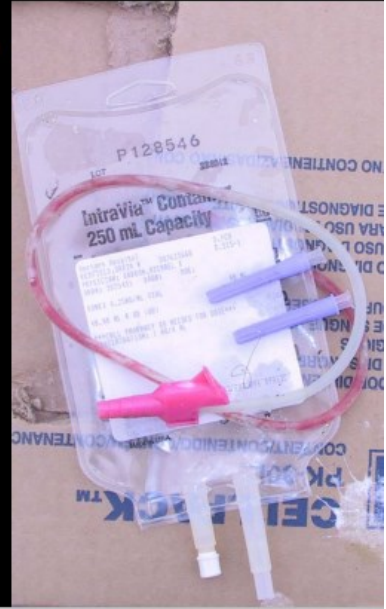


Biomedical Waste Management

What is Biomedical Waste?

Blood or body fluid contaminated disposable medical instruments.

- Gloves
- IV tubing
- Urine cups
- Test strips



Suction canisters contaminated with blood or a managed body fluid



Biomedical Waste Management

What is Biomedical Waste?



Pap Apparatus

- Disposable Speculums
- Cytology Brushes



Any solid or liquid waste which may present a threat of infection to humans, including:

Laboratory Waste

- Specimens
- Cultures
- Biologicals
- Recombinants
- Vaccines – live or attenuated virus



Biomedical Waste Management

What is Biomedical Waste?

Any solid or liquid waste which may present a threat of infection to humans, including:

☑ Discarded Sharps

- Objects which can puncture, lacerate, or break the skin.
- Broken glass and hard plastic
- Scalpels
- Needles



Any item containing a sharp...

☑ Urine transport devices



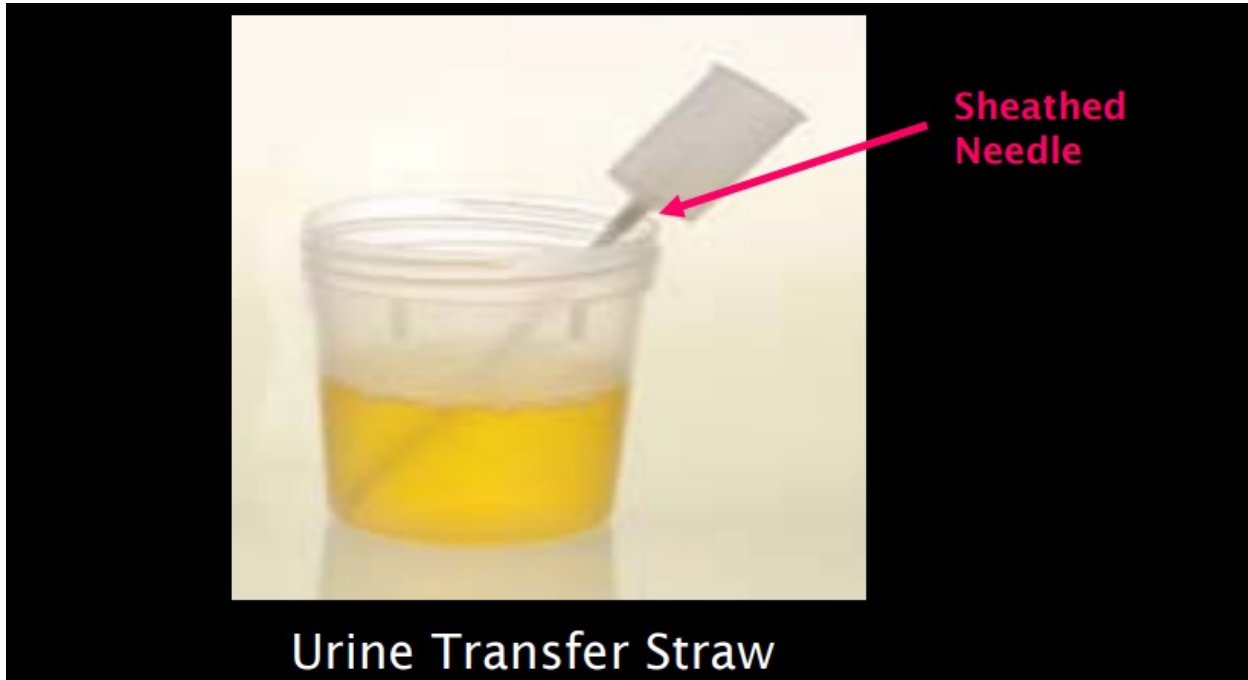
Sheathed Needle



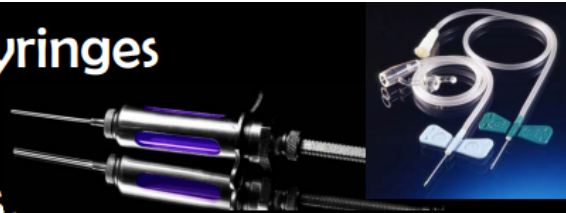
Urine cup with needle embedded in the lid.

Biomedical Waste Management

What is Biomedical Waste?

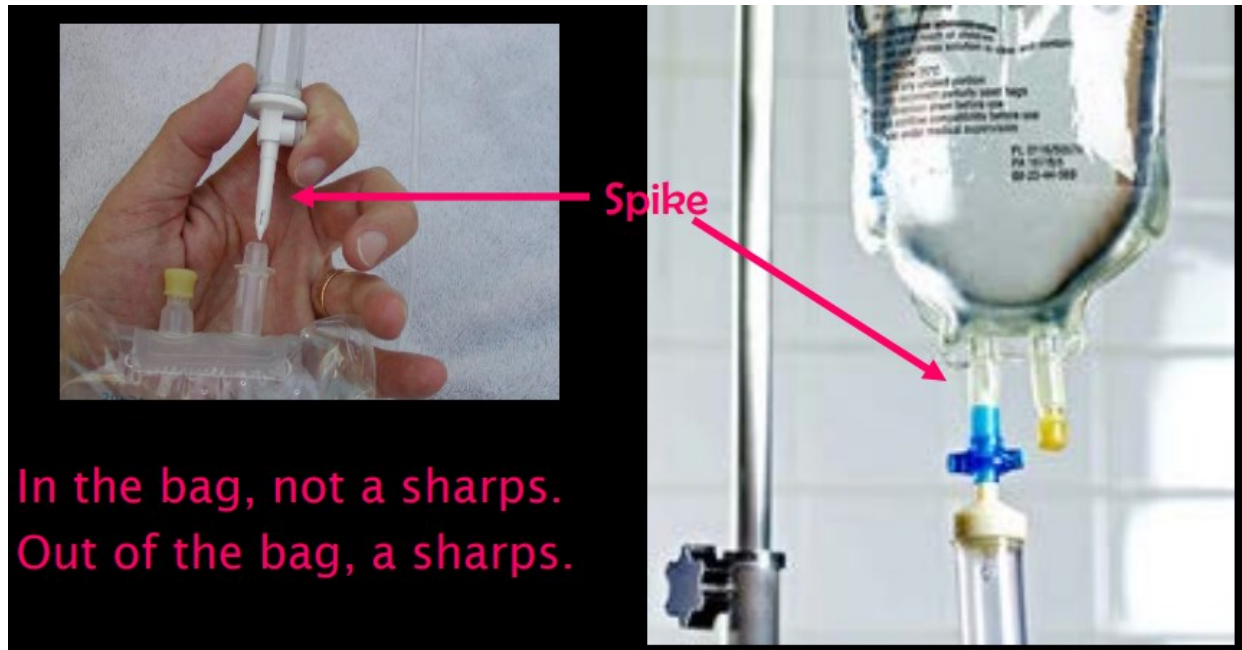


- ✓ All sharps, including syringes with needles attached
- ✓ All finger stick devices, regardless if they are retractable
- ✓ Scalpels and other sharp surgical devices



Biomedical Waste Management

What about an IV Bag Spike?



Do Not Overfill Biomedical Waste Containers

- ✓ Sharps Containers
 - $\frac{3}{4}$ full or when "Full" line is reached
- ✓ Red Bags
 - Leave enough room to ensure bag can be properly sealed
- ✓ Outer Container
 - Ensure container is not overfilled in order to prevent compacting of waste

Biomedical Waste Management

Packages of Biomedical Waste

✓ All packages of biomedical waste shall be sealed closed prior to transfer or transport.

Transfer – the movement of biomedical waste within the facility.

Transport – the movement of biomedical waste from one facility to another facility.

How Should a Red Bag Be Sealed?

✓ The regulations do not specify procedures for sealing bags, but ss. 64E-16.002(22), FAC, defines SEALED as:

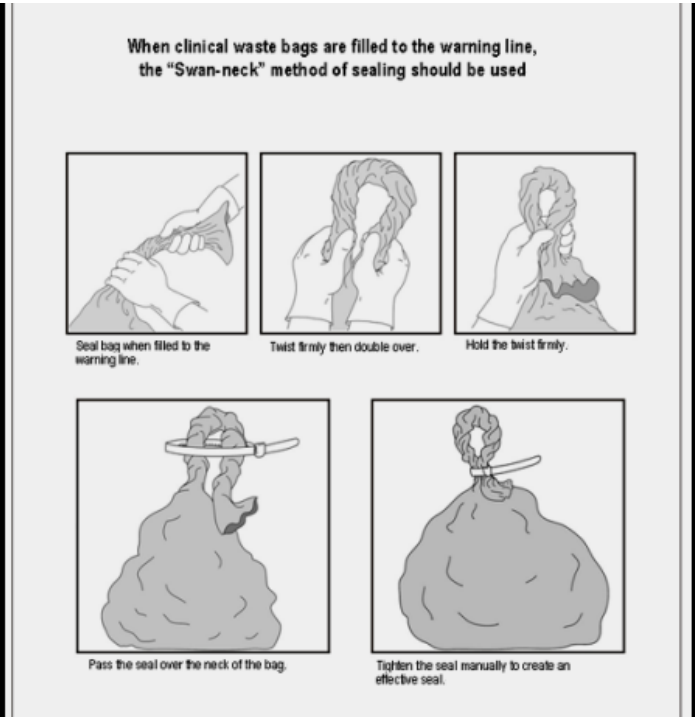
Free from openings that allow the passage of liquids.



Biomedical Waste Management

Recommended Methods for Sealing a Red Bag

- ✓ **Goose Neck (right)**
- ✓ **Twist and single slip knot**



Segregation at Point of Origin

- ✓ **Biomedical waste other than sharps shall be packaged and sealed at the point of origin in impermeable, red plastic bags.**
- ✓ **Sharps shall be discarded at the point of origin into single use or reusable sharps containers.**



Biomedical Waste Management

Generating Areas

- Pre-Op
- Operating Room
- Post-Op
- Recovery
- Radiology
- Laboratory
- Soiled Utility Rooms
- Patient Rooms
- Labor and Delivery
- Emergency Room

Does the red bag or sharps container have to be in an exam/patient room at all times?

No. . . .

Red bags can be stored in the room in a drawer, cabinet, or PPE box and pulled out for use when needed. A sharps container can be portable and carried into the room at the time of injection and then returned to a storage area.

Liquid or Semi-Solid Biomedical Waste

- ✓ Add a solidifier to contents of canister and dispose in red bag
- ✓ Dispose contents into a sanitary sewer system, an onsite sewage treatment and disposal system approved by DEP or DOH
 - Contaminated empty canister disposed into red bag



Biomedical Waste Management

What is the Difference?

- ☑ **Hazardous Waste** - any waste which is dangerous or potentially harmful to our health or the environment.
- ☑ **Biomedical Waste** - any waste which may present a threat of **infection** to humans.
- ☑ **Radioactive Waste** – any waste that contains radioactive material.

Mixing of Biomedical Waste Products

- ☑ All biomedical waste which is mixed with hazardous waste shall be managed as hazardous waste.
- ☑ All biomedical waste which is mixed with radioactive waste shall be managed as radioactive waste.
- ☑ All solid waste, other than hazardous and radioactive, mixed with biomedical waste shall be managed as biomedical waste.

Biomedical Waste Management

Is the Disposal of Non-Biomedical Waste Items into a Red Bag a Violation?

Although this is not a violation, it is very costly to our organization!!



Is this a cost effective practice?

How do you handle biomedical waste that contains or is mixed with radioactive materials?

Packages of radioactive biomedical waste are held in a lead lined container until it decays to proper half-life.

* Nuclear Labs



Biomedical Waste Management

Handling biomedical waste containing or comingled with hazardous materials

Hazardous biomedical waste must be:

- packaged as hazardous waste
- shipped to a treatment handles dual waste.



Restrooms: Red Bag or Not?

In public restrooms, are feminine hygiene products required to be handled as biomedical waste?

No, this is not required. It is recommended that red bags be provided in patient restrooms located in specialty areas such as OB/Gyn, Labor & Delivery, etc.

Biomedical Waste Management

Written Biomedical Waste Plan

Is a site-specific, written plan to manage biomedical waste.

Includes:

- ✓ A description of training for personnel
- ✓ Procedures for segregating, labeling, packaging, transporting, storing, and treating biomedical waste
- ✓ Procedure for decontaminating biomedical waste spills
- ✓ Contingency plans for emergencies
- ✓ Procedures specific to each specialty if procedures vary.

Inspectors Checklist - #2

Biomedical waste plans should be updated when:



- ✓ Changes occur in the permitted facility
- ✓ The rules are rewritten

Inspectors Checklist - #2

Biomedical Waste Management

Contingency Plan For Emergencies

An alternative plan for

- ☑ Transport – generators should be knowledgeable of other alternatives
- ☑ Treatment – facilities that treat biomedical waste shall have a written agreement with another treatment facility
- ☑ Storage in event of natural disaster
(especially those who store large amounts of BMW packaged in transport carts outdoors)

Inspectors Checklist - #2

Training

- ☑ Shall detail compliance with facility's written plan and Chapter 64E-16, F.A.C.
- ☑ Provided to personnel prior to commencement of duties and is updated annually.

SHALL INCLUDE:

- Identification
- Segregation
- Packaging
- Labeling
- Storage
- Transport
- Treatment
- Personal Protective Equipment

Inspectors Checklist - #3

Biomedical Waste Management

How Can We Prevent Others From Being Exposed?

- Healthcare providers who assist home users shall inform the home user verbally and in writing of the recommended method for managing biomedical waste generated in the home setting.
- Home users who administer their own injections should segregate and package their sharps in a manner that reduces the chance of exposure to the public.
 - ◇ Local sharps collection program
 - ◇ U.S. Postal Service approved mail-in sharps system
 - ◇ Other method allowed by DOH, DEP, and local landfills and trash haulers
- One suggestion for properly disposing of needles in the home environment is:
 - ◇ Put needles into a container that has a lid and is strong enough to keep the needles from sticking through the sides, such as liquid detergent bottles or metal cans

Needle Disposal Programs Needed in the Following Counties:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Baker | <input checked="" type="checkbox"/> Liberty |
| <input checked="" type="checkbox"/> Calhoun | <input checked="" type="checkbox"/> Madison |
| <input checked="" type="checkbox"/> Duval | <input checked="" type="checkbox"/> Monroe |
| <input checked="" type="checkbox"/> Franklin | <input checked="" type="checkbox"/> Okeechobee |
| <input checked="" type="checkbox"/> Gulf | <input checked="" type="checkbox"/> St. Lucie |
| <input checked="" type="checkbox"/> Holmes | <input checked="" type="checkbox"/> St. Johns |
| <input checked="" type="checkbox"/> Jackson | <input checked="" type="checkbox"/> Santa Rosa |
| <input checked="" type="checkbox"/> Lake | |